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ABSTRACT

Thirty-seven secondary counselors attended a 2-week intensive training program at Carver Career and Technical Education Center to update their knowledge of vocational education and of the world of work, to improve their counseling and guidance techniques, and to develop new or revised plans of occupational guidance and counseling for their respective schools. The 2-week training program was the first phase of the Counselor Awareness Program for Vocational Education. Implementation of the new or revised plans of occupational guidance and counseling in participants' schools during the 1971-72 school term was the second phase. Important long-range goals were to help students improve their knowledge and understanding of vocational education and their ability to make wise career decisions. As part of the on-site experience, counselors observed vocational education teachers instructing students, heard presentations by the teachers designed to familiarize counselors with a variety of curricular activities performed in the vocational training areas and with the aptitudes students need for success, and participated in simulated work tasks. Each counselor participated in at least 15 of these sessions, known as Work Sample Exposures. Workshop methods included group guidance and individual counseling sessions, field trips, group discussions, reaction panels, and taped demonstrations of counseling sessions. (Author)

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Final Report

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Counselor Awareness Program For Vocational Education

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July, 1972

West Virginia
State Board of Education
State Department of Education
Bureau of Vocational, Technical and Adult Education
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Counselor Awareness Program For Vocational Education

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Kanawha County Board of Education

Charleston, West Virginia
July, 1972

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West Virginia
State Board of Education
State Department of Education
Bureau of Vocational, Technical and Adult Education
Division of Vocational Education

PREFACE

The purpose of this report is to present the significance, the objectives, the methodology, and the findings of the Counselor Awareness Program for Vocational Education. A detailed breakdown of all statistical data summarized in this report is on file in the Department of Guidance and Social Services, Kanawha County Schools. Included in the data are results of the self-rating scales for participating students and counselors. Other data available are narrative remarks of participants, individual school plans of occupational guidance and counseling developed by counselors, and summaries of programs implemented in secondary schools as a result of the first phase of the project.

Numerous individuals took an active part in the planning, development, implementation, and evaluation of the program described in the report. We express our appreciation to the county administrative staff and supervisory personnel, principals, teachers, counselors, and pupils. Also, appreciation is expressed to local consultants and resource people who participated in the project.

We are especially indebted to Mr. John Santrock, Associate Superintendent of Instruction and Curriculum; Mr. James Smith, Assistant Superintendent of Pupil Services; Mr. Clarence Burdette, Director of Career, Technical and Adult Education; Mr. Ernest Husson, Principal of Carver Career and Technical Education Center and his staff; Mr. William Calhoun, Principal of Benjamin Franklin Career and Technical Education Center; Dr. Jonell Kirby, West Virginia University/Kanawha Valley Graduate Center, for their suggestions and wise advise in developing the project and for their assistance in conducting the workshop. Mr. Fred Radabaugh, Coordinator of Testing and Evaluation, also deserves our thanks for giving faithfully and generously of his time and counsel on many matters.

To Mr. Husson and his Carver staff belong much of the credit for the success of the two-week counselor training phase of the project. Their generous hospitality provided a relaxed atmosphere for accomplishing the task at hand. Their splendid cooperation in making the Work Sample Exposure an outstanding professional experience for participants helped to enhance relationships between secondary school counselors and career and technical education personnel.

Without the cooperation of the secondary principals and teachers, the plans of occupational guidance and counseling could never have been implemented in the schools. A very special thanks is due them. For the leadership of secondary school counselors in planning and executing these plans, we are indeed grateful.

Virginia L. Robson
David L. Acord

SUMMARY

Thirty-seven secondary counselors attended a two-week intensive training program at Carver Career and Technical Education Center in July, 1971, to update their knowledge of vocational education and of the world of work, to improve their counseling and guidance techniques, and to develop new or revised plans of occupational guidance and counseling for their respective schools. The two-week training program was the first phase of the Counselor Awareness Program for Vocational Education. Implementation of the new or revised plans of occupational guidance and counseling in participants' schools during the 1971-72 school term was the second phase. Important long-range goals were to help students improve (1) their knowledge and understanding of vocational education and (2) their ability to make wise career decisions.

Specific objectives of the Counselor Awareness Program for Vocational Education were the following:

1. To broaden student knowledge and understanding of the world of work as a result of counselor awareness in vocational education so that students will be better able to make wise career decisions.

2. To develop in students positive attitudes toward the world of work and feelings of personal dignity in their chosen careers through individual and group counseling and by making occupational information available to them.

3. To reduce the number of dropouts in the secondary schools by one-half of one per cent of the enrollment.

4. To assist each participating counselor to develop for his individual school an intensive plan of occupational guidance and counseling.

5. To update counselor knowledge and understanding of careers available through vocational education, apprenticeships, on-the-job training, post-secondary programs, and job-oriented courses in the comprehensive high school during a two-week summer workshop to be held in the Carver Career and Technical Education Center.

6. To improve cooperative efforts among vocational education personnel, counselors, and manpower agencies as evidenced by increased contact of school personnel with these agencies.

7. To use profitably the cooperative efforts of vocational education personnel, counselors, and principals through greater involvement in inservice programs beginning with the summer workshop and continuing throughout the school year.

Project CAP was designed to focus counselor attention on needs of students who plan to enter the world of work through (1) a career and technical education center, (2) any post-secondary vocational school, (3) apprenticeship training, (4) on-the-job training, or (5) job-oriented courses in the comprehensive high school. Too long counselor attention had been centered on needs of the college-bound student.

The summer training program at the Carver Center provided opportunity for counselors to shift their attention. In this on-site experience, counselors (1) observed vocational education teachers instructing students, (2) heard presentations by the teachers designed to familiarize counselors with a variety of curricular activities performed in the vocational training areas and with the aptitudes students need for success, and (3) participated in simulated work tasks. Each counselor participated in at least fifteen of these sessions known as Work Sample Exposures.

In addition to work sample exposures, workshop mtehods included group guidance and individual and group counseling sessions with summer school students, field trips, group discussions, reaction panels, and taped demonstrations of counseling sessions. Materials were displayed in the Guidance Materials Resource Center. Personnel included three university consultants; the Carver staff; and representatives from business, industry, labor unions, and government. Evaluation procedures used were self-rating scales, questionnaires, and review of the individual school plans.

There were initial, post and longitudinal assessments. Major findings of these assessments follow:

1. Marked improvement in counselor knowledge and understanding of vocational education.

2. Marked improvement in counselor ability to help students make wise career decisions.

3. Slight improvement in knowledge and understanding of vocational education among summer school students involved in the project.

4. Signs of improvement in student attitudes toward vocational education and non-professional careers.

5. Greater use of community resources by counselors.

6. Full or partial implementation of new or revised plans of occupational guidance and counseling in twenty-six of the twenty-seven secondary schools represented in the project.

7. Greater vocational education awareness on the part of students, teachers, counselors, and administrators.

8. No improvement in student dropout rate in secondary schools.

9. High commendations by counselors of the content and effectiveness of the two-week training program.

Although the longitudinal assessment showed very slight improvement in student knowledge and understanding of vocational education, there is reason to believe that as the plans are fully implemented in individual schools over a span of years, marked improvement will occur. It is further believed that the dropout rate will decrease.

The highly favorable overall counselor response to the project, especially the workshop phase, is a strong recommendation for this type program in keeping counselors abreast of the times in vocational and career education. Counselor testimony regarding the unique feature of this project--the work sample exposure--indicates that more knowledge was garnered about careers and career training through this experience than had ever been gained through books or formal guidance classes. In view of this, it is recommended that Kanawha County Schools use the work sample exposure technique to familiarize counselors with career training programs at the Franklin Center, and that they explore the possibility of extending its use to on-site, intensive, short-term training programs out in business and industry.

As a final recommendation, it is suggested that a federally-funded Counselor Awareness Program for Vocational Education be held in each career and technical education center of the State in order to reach counselors on a state-wide basis.

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CHAPTER I

PROBLEM UNDER CONSIDERATION

With the opening of two new career and technical education centers in Kanawha County, West Virginia, came the sudden realization that counselors in the comprehensive high schools were inadequately prepared to acquaint students with programs of the two centers and to apprise them of job opportunities available upon completion of any one of the center programs. These two centers--the Carver Center serving the five comprehensive high schools in the eastern section of the county and the Franklin Center serving the six in the western section--offer a total of thirty-four different instructional programs. In many instances, counselor knowledge of these courses did not extend beyond the course descriptions found in the Carver and Franklin bulletins.

I. STATEMENT OF THE PROBLEM

Keeping counselors abreast of the times in the area of vocational education and occupational information is a real problem in a highly automated society where there is continual and rapid change in the occupational scene. Yet, unless counselors do up-date their knowledge and understanding in these areas, they cannot competently perform their duty of preparing students for the world of work.

As an initial step in solving the problem, Kanawha County Schools submitted a proposal for an exemplary project in vocational education to the State Director of Vocational-Technical Education. In preparing the proposal, designers searched for reasons for counselor neglect of career guidance. The search led to conjecture that such neglect may be due to the fact that requirements for counselor certification in West Virginia include so few courses in occupational information, but is more likely due to the rapidity of change in current occupations, making it difficult for counselors to keep abreast of the time in the area of occupational information.

II. REVIEW OF THE LITERATURE

Whatever the reason for the problem, Kanawha County does not stand alone in giving scant attention to career guidance. In reviewing the literature, designers of the project found many opinion writers and several research studies asserting that occupational guidance and counseling is given too little attention. Recent research and development programs, conferences, and workshops throughout the country attest to the

fact that there is concern for strengthening counselor competence in this area. Evidence that the proposed project would succeed was supported by several such programs directly or indirectly related to the proposed exemplary project, a few of which are cited herein.

A two-week summer institute sponsored by Plans for Progress and the University of San Francisco, encompassing company visitations and scheduled campus speakers augmented by seminar discussions, provided significant improvement in counselors' perceptions of industry expectations and requirements. This study indicated that no appreciable amount of knowledge about jobs and companies is garnered as a result of formal teacher education or guidance experience. Such knowledge seems to be derived significantly from outside experience such as this short-term exposure.[1]

Thirty secondary school counselors selected because of their need for additional training and the need for more vocational counseling in the communities they represented, participated in a four-week program centered around content instruction on vocational education, philosophy, and training programs. Activities included visits to training programs, presentations by resource persons, counseling interview sessions with youths and adults faced with vocational selection and training problems, seminar sessions and individually planned projects to implement a community action approach for meeting the vocational education needs of youth in the trainee's school community. Follow-up visits by the director and staff to the trainee's school showed implementation of some of the training program-initiated projects, planning of others, and a highly favorable response to the program.[2]

Twenty-one school counselors from four states participated in a five-week training program conducted to (1) provide intensive training which would develop their ability to make practicable applications of counseling skills in assisting youth and young adults in choosing and preparing for a vocation, (2) bring them information of the existing possibilities and of the new areas of training offered by federal legislation, and (3) provide them with a more thorough knowledge and

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[1]William Litzinger and Cornelis Visser, "Closing the Vocational Counseling Realities Gap," The Personnel and Guidance Journal, 46:650-654, March, 1968.

[2]Donald L. Frick, "A Training Program for Vocational Counselors," (Colorado State University, Fort Collins, February 1, 1966), pp. 1-24, cited in Abstracts of Research and Related Materials in Vocational and Technical Education, Summer, 1968, pp. 702-706.

understanding of the philosophy of vocational education. Recommendations included having more training programs to improve counselor performance.[3]

Project PIT (Program of Industrial Training) was a pilot program of industrial training for Detroit's innercity youth. This short-term summer program gave results which indicated a significant shift in educational and occupational aspirations of youth to a high and more realistic level. An analysis of the Detroit high school population prior to the program had shown that most youth had not selected an occupational goal or had selected one that was unrealistic for their abilities and potentials.[4]

A one-week institute to develop objectives and models for a continuous exploratory program related to the world of work from junior high school through senior high school was held in Carrollton, Georgia, in September, 1969. The participants tried to identify behavioral objectives expected of the student, develop a model for both large city and rural schools, and aid representatives of the various states in setting up a plan for their own states.[5]

Approximately sixty Georgia high school counselors and area vocational-technical school staff members participated in a two-day conference to explore working relationships between the two groups and to examine the unique characteristics of the vocational school and the problems related to this type of education. Recommendations included (1) defining the role of the counselor and the personnel worker in cooperative efforts to acquaint students with vocational-technical school opportunities, (2) compiling a list of cooperative activities and

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[3]Donald L. Frick, "A Training Program for Vocational Counselors," (Colorado State University, Fort Collins, February 28, 1967), pp. 1-43, cited in Abstracts of Research and Related Materials in Vocational and Technical Education, Summer, 1968, p. 702.

[4]"Project PIT: A Summer Industrial Work Experience and Occupational Guidance Progarm," (Wayne State University, Detroit, 1967), pp. 1-35, cited in Abstracts of Research and Related Materials in Vocational and Technical Education, Summer, 1969, p. 748.

[5]Gene Bottoms and W. Ray Cleere, "A One-Week Institute to Develop Objectives and Models for a Continuous Exploratory Program Related to the World of Work from Junior High through Senior High School," (West Georgia National Conference, Carrollton, September, 1969), pp. 1-172, cited in Abstracts of Research and Related Materials in Vocational and Technical Education, Summer, 1970, p. 824.

specific information needed by counselors and potential vocational-technical students, and (3) listing media for making the information available.[6]

Kanawha County's Project CAP (Counselor Awareness Program for Vocational Education) became another attempt of concerned guidance and vocational education personnel to place emphasis on the badly neglected area of occupational guidance and counseling as related to vocational education. It was designed to focus counselor attention on needs of students who plan to enter the world of work through (1) either of the two career and technical education centers, (2) any post-secondary vocational school, (3) apprenticeship training, (4) on-the-job training, or (5) job oriented courses in the comprehensive high school. Emphasis was placed on programs of occupational guidance and counseling for these students, because effective programs of educational guidance and counseling for the college-bound student were already in existence in all Kanawha County secondary schools.

III. OBJECTIVES

A major goal of the project was to help participating counselors, through a two-week intensive summer training program, to update their knowledge of the world of work and of vocational education and to improve their occupational guidance and counseling techniques. As a consequence of their involvement in the project, counselors, it was believed, would be better prepared to acquaint students with programs in vocational education and to help them make wise career decisions.

Specifically, the objectives of the Counselor Awareness Program for Vocational Education were the following:

1. To broaden student knowledge and understanding of the world of work as a result of counselor awareness in vocational education so that students will be better able to make wise career decisions.

2. To develop in students positive attitudes toward the world of work and feelings of personal dignity in their chosen careers through individual and group counseling and by making occupational information available to them.

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[6]James E. Bottoms, "Conference on Ways the Area School Personnel Worker and the High School Counselor Can Work Together, A Report," (Georgia State Department of Education, Atlanta, September, 1966), pp. 1-75, cited in Abstracts of Research and Related Materials in Vocational and Technical Education, Winter, 1968, p. 366.

3. To reduce the number of dropouts in the secondary schools by one-half of one per cent of the enrollment.

4. To assist each participating counselor to develop for his individual school an intensive plan of occupational guidance and counseling.

5. To update counselor knowledge and understanding of careers available through vocational education, apprencticeships, on-the-job training, post-secondary programs, and job-oriented courses in the comprehensive high school during a two-week summer workshop to be held in the Carver Career and Technical Education Center.

6. To improve cooperative efforts among vocational education personnel, counselors, and manpower agencies as evidenced by increased contact of school personnel with these agencies.

7. To use profitably the cooperative efforts of vocational education personnel, counselors, and principals through greater involvemnnt in inservice programs beginning with the summer workshop and continuing throughout the school year.

III. LIMITS OF THE PROJECT

Project CAP was developed as a cooperative venture by two divisions of Kanawha County Schools--the Division of Career, Technical and Adult Education and the Division of Guidance, Counseling and Testing. Federal funds in the amount of $20,000 were made available through the Bureau of Vocational, Technical and Adult Education, State Department of Education, under provision of the Vocational Education Act Amendment of 1968. These funds were used to conduct a two-week summer workshop for counselors and to provide career guidance materials in the various high schools where workshop participants would be implementing improved programs of occupational guidance and counseling.

The project was limited to thirty-seven secondary counselors--sixteen from junior highs, nineteen from senior highs, and two from career and technical education centers. Thirty-five of the participants were paid through Project CAP funds. The two career and technical education center counselors who were already employed twelve months received their regular salaries. For evaluation purposes, they were classified as senior high counselors. Thirty-five of the participants were from Kanawha County and two from Fayette County. The two Fayette County counselors represented schools whose students feed into the Carver Center. Although the project was open to private school counselors, none participated.

The first phase of the project was the two-week summer workshop conducted at the Carver Center. The administrative design for the workshop is presented in Appendix A, page 29. The second phase was implementation of the individual school plans of occupational guidance and counseling that were developed during the workshop. Implementation began during the 1971-72 school year.

CHAPTER II

PROJECT METHODOLOGY

The methodology used in attempting to attain project objectives and the procedures employed to evaluate the outcomes will be described here.

I. THE COUNSELOR TRAINING PROGRAM

The summer training program was an on-site experience in the Carver Career and Technical Education Center where participants (1) observed vocational education teachers instructing students, (2) heard presentations by the teachers designed to familiarize counselors with a variety of curricular activities performed in the vocational training areas and with the aptitudes students need for success, and (3) participated in simulated work tasks. Each counselor participated in at least fifteen of these sessions known as work sample exposures.

To improve their occupational guidance and counseling techniques, participants counseled summer students in simulated situations at the Center. In addition to Carver students, there were students from three other Kanawha County summer schools bused to the Center for tours of Carver and counseling sessions. During the three-hour experience, each student toured the facility under the direction of a Project CAP counselor and participated in group guidance activities and in an individual or group counseling session. Counselors administered Super's Work Values Inventory to their counselees as a springboard for launching the career counseling sessions.

During the two-week session, all counselors developed new or improved programs of occupational guidance and counseling to be implemented in their respective schools during the 1971-72 school term.[7] Three consultants from different universities were available during the workshop to confer with participants about their plans and to present new concepts and innovations in occupational guidance and vocational education. During a final day session, counselors divided into two groups--junior high and senior high--to share their plans.

Intensive involvement of counselors with representatives from manpower agencies and from business and industry was another feature of the

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[7] Individual School Counselor Plans for Vocational Education (Charleston, West Virginia: Kanawha County Schools, 1971), pp. 1-125. (Duplicated.)

workshop program. Appearing as panelists or speakers, these representatives allowed time for group interaction following their presentations. Contacts with these persons, it was hoped, would result in better cooperation between public education and manpower agencies and in significant improvement of counselors' perceptions of business and industry expectations and requirements.

A highlight of the workshop was a field trip to the Union Carbide Corporation plant in South Charleston. Here counselors observed workers in clerical and accounting offices, maintenance shops, drum filling and tank car/truck loading units, operating units, and laboratories. In keeping with the project commitment to focus on jobs requiring other than college-type training, professional workers were not observed.

Other methods used in orienting counselors to occupational guidance and vocational education were lectures, reaction panels, listening teams, demonstrations, films, slides, and Life Career Games. Materials were displayed in a Guidance Materials Resource Center. Participants brought appropriate audio-visual and printed materials from their respective schools and major publishers displayed career materials. The media specialist for the Carver Center worked with participants in screening and reviewing materials.

Only major features of the workshop program have been presented in the preceding paragraphs. However, the Counselor Awareness Project Workshop Schedule in Appendix A, pages 30-34 and the Work Sample Exposure Schedule in Appendix A, pages 35-36 present details of the program. A list of workshop participants is found in Appendix A, pages 37-39.

In March, 1972, counselors attended an inservice meeting to review Project CAP objectives and to share their experiences in attempting to implement their school plans. In April, 1972, they met at the Franklin Career and Technical Education Center which opened at the beginning of the 1971-72 school year to improve their knowledge and understanding of the training programs offered at the new Center.

II. EVALUATION PROCEDURES

Evaluation procedures employed centered around each program objective. These procedures included student and counselor self-rating scales, a program content and effectiveness rating scale, dropout survey forms, tallies of contacts with resource persons and agencies, and counselors' summaries of the extent to which their individual school plans were implemented during the 1971-72 school term.

The first day of the workshop counselor participants were administered the Counselor Self-Rating Scale in Vocational Education. Developed by the project designers, the scale consisted of twenty-two items to sample counselor knowledge and understanding of vocational education and

ten items to sample counselor ability in helping students make wise career decisions. The same five-point rating scale was administered the last day of the workshop in order to compare pre- and post-rating results. It was also administered ten months later near the end of the 1971-72 school term after counselor participants had implemented a part or all of the school plan developed during the workshop.

Prior to the opening of the 1971-72 school year, eighteen Kanawha County counselors who had not participated in the workshop were administered the rating scale. Results for non-participating counselors were compared with initial and longitudinal results for participating counselors. Non-participating counselors were not administered the rating scale on a longitudinal basis because of their exposure to school plans developed during the summer workshop and implemented during the 1971-72 school term, which may have caused results to be biased. The Counselor Self-Rating Scale in Vocational Education is presented in Appendix B, pages 43-45.

In order to evaluate program content and effectiveness, a five-point rating scale was administered the thirty-seven counselors on the last day of the workshop. The same eighteen-item scale developed by the project designers was administered to the workshop participants one year later so as to compare their evaluation after they had implemented part or all of their school plans with their initial evaluation. The Program Content and Effectiveness Scale is presented in Appendix B, page 49.

The Student Self-Rating Scale in Vocational Education, a five-point scale developed by project designers to sample student knowledge and understanding of vocational education and of sources of information concerning careers and jobs, was administered the 246 summer school students participating in the workshop program before their exposure to Project CAP activities. Near the end of the 1971-72 school year, the same scale was administered to 142 of the students who had participated in the Carver program the previous summer. Because some of the students had withdrawn from school, transferred to other schools, or been graduated at the close of the summer school, it was not possible to obtain a longitudinal rating for each of the original 246 students. (The Student Self-Rating Scale in Vocational Education is presented in Appendix B, pages 46-48).

At the close of the 1971-72 school year, Project CAP counselors were asked to summarize and evaluate the implementation of their school plans. These summaries included data concerning the number of agencies and other community persons used in implementing the programs and changes in student attitudes toward vocational education and non-professional careers. Dropout data for the 1971-72 school term provided information for evaluation of the program objective pertaining to reduction of the dropout rate.[8]

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[8]David L. Acord and Fred Radabaugh, A Report of School Dropouts, 1971-72, (Charleston, West Virginia: Kanawha County Schools, 1972), pp. 1-13. (Duplicated.)

CHAPTER III

PROJECT RESULTS

As explained in Chapter II, various evaluation procedures were employed to measure the accomplishments of Project CAP. Results obtained will be presented here.

I. IMPROVEMENT IN COUNSELOR KNOWLEDGE AND UNDERSTANDING OF VOCATIONAL EDUCATION

The data with regard to increase in counselor knowledge and understanding of vocational education resulting from counselor participation in the two-week summer workshop are presented in Appendix C, Tables I-VIII. Increase was determined by means of the Counselor Self-Rating Scale administered to participants the first day of the workshop (initial assessment), the last day of the workshop (post assessment), and ten months later near the end of the 1971-72 school term (longitudinal assessment).

Table I, Appendix C, pages 53-55, shows the percentage of senior high counselors rating their knowledge and understanding of vocational education above average to excellent on each item of the five-point rating scale (5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low). On 13 of the 22 items, senior high school counselors showed a gain of better than 50 per cent in knowledge and understanding of vocational education at the close of the two-week workshop. From the initial assessment to the longitudinal assessment, they showed a gain of better than 50 per cent on 10 of the 22 items.

In the post assessment, the largest gain (71 per cent) was found in motivation of students toward the world of work and availability of resource materials for vocational-technical education and vocational guidance. In the longitudinal assessment, the largest increase (71 per cent) was noted in pre-requisites (aptitudes, interests, personality traits, and training) required for success in different vocational areas and availability of resource materials for vocational-technical education and vocational guidance.

Table II, Appendix C, pages 56-58, gives the percentages of junior high school counselors rating their knowledge and understanding of vocational education above average to excellent on each item of the five-point rating scale. Junior high counselors made a gain of better than 50 per cent between the initial assessment and the post assessment on 15 of the 22 items. At the end of the 1971-72 school term, they showed a gain of better than 50 per cent on 7 of the 22 items over the initial assessment results.

The post assessment showed the largest increases for junior high counselors in the following areas:

1. Requirements for entry level job skills in the various vocational-technical areas (82 per cent).

2. Basic principles utilized in the teaching of job skills (82 per cent).

3. Work content--the duties performed and materials used--of various occupations (75 per cent).

The longitudinal assessment showed the greatest increases for junior high counselors in these areas:

1. The levels of learning within a specific job cluster (69 per cent).

2. Post-secondary and adult programs available to students in Kanawha County (69 per cent).

3. Minimum wage/hour law requirements (68 per cent).

Table III, Appendix C, pages 59-61, shows the composite change from the initial assessment to the post assessment and from the initial assessment to the longitudinal assessment for the thirty-seven secondary counselors. Using the percentage of secondary counselors rating their knowledge in the above average to excellent category, it was found that they made a gain of more than 50 per cent on 16 of the 22 items between the initial assessment and the post assessment. They showed a gain of more than 50 per cent on 9 of the 22 items in the longitudinal assessment.

The largest increases between the initial assessment and the post assessment were observed in the requirements for entry level job skills in the vocational areas (73 per cent) and the availability of resource materials for vocational-technical education and vocational guidance (71 per cent). Between the initial assessment and the longitudinal assessment, the largest increases were in the following areas:

1. Availability of resource materials for vocational-technical education and vocational guidance (65 per cent).

2. The world of work as it relates to advising students in vocational and career decisions (62 per cent).

3. The overall occupational picture, i.e. the major groups of workers and employment trends within these groups (62 per cent).

4. Post-secondary and adult programs available to students in Kanawha County (62 per cent).

Before the opening of the 1971-72 school term, the Kanawha County counselors who had not participated in the summer workshop were administered the Counselor Self-Rating Scale in Vocational Education (non-participant assessment). Table IV, Appendix C, pages 62-64, shows the percentage of these counselors, hereafter called non-participants, rating their knowledge and understanding of vocational education above average to excellent on each item of a five-point rating scale. It also shows the per cent of gain of participants over non-participants near the end of the 1971-72 school term, as well as per cent of gain of participants from the initial assessment to the longitudinal assessment.

Non-participants were not post assessed because of their exposure to school plans developed during the summer workshop and implemented during the 1971-72 school term which may have caused results to be biased. Table IV, Appendix C, pages 62-64, indicates that there was no item in the rating scale on which more than 50 per cent of the non-participants considered their knowledge and understanding of vocational education above average to excellent. The gain for participants over non-participants was better than 50 per cent on 10 of the 22 items. The gain for participants between the initial assessment and the longitudinal assessment was better than 50 per cent on 9 of the 22 items.

Mean scores for senior high school counselors on items in the five-point Counselor Self-Rating Scale in Vocational Education, Part A, are given in Table V, Appendix C, pages 65-67. The mean difference from the initial assessment to the post assessment ranged from 0.5 to 1.5 with an average gain of 1.1 units in counselor knowledge and understanding of vocational education. The mean difference from the initial assessment to the longitudinal assessment ranged from 0.7 to 1.4 with an average gain of 1.1 units.

Table VI, Appendix C, pages 68-70, gives the mean scores for junior high counselors on items in the same rating scale. The mean difference from the initial assessment to the post assessment ranged from 0.6 to 1.9 with an average gain of 1.2 units. The mean gain from the initial assessment to the longitudinal assessment ranged from 0.5 to 1.6 with an average gain of 1.0 unit.

Composite mean scores for the 37 secondary counselors on items in the same rating scale are given in Table VII, Appendix C, pages 71-73. Counselors showed a mean gain ranging from 0.5 to 1.6, or an average gain of 1.1 units, from the initial assessment to the post assessment. They showed a mean gain ranging from 0.4 to 1.4, or an average gain of 1.1 units, from the initial assessment to the longitudinal assessment.

Mean scores on each item of the rating scale are shown in Table VIII, Appendix C, pages 74-76, for non-participants and participants. The mean gain of participants from the initial assessment to the post assessment ranged from 0.4 to 1.4 with an average gain of 1.1 units. The mean gain of participants over non-participants as measured by the longitudinal assessment ranged from 0.4 to 1.5 with an average gain of 1.0 units.

II. IMPROVEMENT IN COUNSELOR ABILITY TO HELP STUDENTS MAKE WISE CAREER DECISIONS

The data with regard to improvement in counselor ability to help students make wise career decisions are presented in Appendix C, Tables IX - XVI. Improvement was determined by means of the Counselor Self-Rating Scale in Vocational Education administered the first day of the workshop (initial assessment), the last day of the workshop (post assessment), and ten months later near the end of the 1971-72 school term (longitudinal assessment).

In Table IX, Appendix C, pages 77-78, is found the percentage of senior high counselors rating their ability to help students make wise career decisions above average to excellent on each item of the five-point rating scale. Counselors made a better than 50 per cent gain between the initial assessment and the post assessment on 6 of the 10 items surveyed. On the same items, they made a better than 50 per cent gain between the initial assessment and the longitudinal assessment. The greatest gain (76 per cent post assessment and 75 per cent longitudinal assessment) was in ability to help students identify their strongest needs and to select occupations that can help satisfy some of these needs.

Table X, Appendix C, pages 79-80, presents similar information for junior high counselors who made a better than 50 per cent gain between the initial assessment and the longitudinal assessment on 7 of the 10 items surveyed. From the initial assessment to the longitudinal assessment, they made a better than 50 per cent gain on 8 of the 10 items. The greatest gain (75 per cent for both the initial assessment and the longitudinal assessment) was in ability to correlate vocational training with academic school subjects.

Composite percentages for the 37 secondary counselors are given in Table XI, Appendix C, pages 81-82. Secondary counselors showed an improvement of better than 50 per cent between the initial assessment and the post assessment on 8 of 10 items. Between the initial assessment and the longitudinal assessment, they showed an improvement of better than 50 per cent on 6 of the 10 items. The largest gains were noted in the post assessment on ability to correlate vocational training with academic school subjects (66 per cent) and the ability to help students identify their strongest needs and to select occupations that can help satisfy some of these needs (63 per cent). In the longitudinal assessment, the largest gains were found in ability to counsel students wisely on career decisions (65 per cent) and to help students identify their strongest needs and to select occupations that can help satisfy some of these needs (65 per cent).

Prior to the opening of the 1971-72 school year, Kanawha County counselors who had not participated in the summer workshop were administered the Counselor Self-Rating Scale in Vocational Education, Part B

(initial assessment). Table XII, Appendix C, pages 83-84, shows the percentage of these counselors, hereafter called non-participants, rating their ability to help students make wise career decisions above average to excellent on each item of a five-point scale. It also shows the per cent of gain of participants over non-participants near the end of the 1971-72 school term, as well as per cent of gain of participants from the initial assessment to the longitudinal assessment.

Again, non-participants were not administered a post-test because of their exposure to school plans developed during the summer workshop and implemented during the 1971-72 school term which may have caused results to be biased. Table XII, Appendix C, pages 83-84, shows that there were two items in the rating scale on which better than 50 per cent of the non-participants rated their ability to counsel students above average to excellent. On the other hand, there was only one item on which better than 50 per cent of the participants rated their ability to counsel students above average to excellent in the initial assessment. The gain of participants over non-participants was better than 50 per cent on 4 of the 10 items, whereas the gain for participants from the initial assessment to the longitudinal assessment was better than 50 per cent on 6 of the 10 items.

The mean scores for senior high counselors on items in the Counselor Self-Rating Scale in Vocational Education, Part B, are shown in Table XIII, Appendix C, pages 85-86. The range of increase in counselor ability to help students make wise career decisions was from 0.7 to 1.1 units, or an average gain of 1.0 unit, between the initial assessment and the post assessment. The range of gain between the initial assessment and the longitudinal assessment ranged from 0.5 to 1.0 with an average gain of 0.8 unit.

Table XIV, Appendix C, pages 87-88, presents the mean scores for junior high counselors. The improvement noted from the initial assessment to the post assessment ranged from 0.6 to 1.0 in ability to counsel students in vocational education with an average gain of 0.9 unit. The gain from the initial assessment to the longitudinal assessment ranged from 0.7 to 1.4 with an average gain of 1.0 unit.

The composite mean gains for the 37 secondary counselors are found in Table XV, Appendix C, pages 89-90. The range of gain in counselor ability to counsel students in vocational education ranged from 0.8 to 1.0 unit, or an overall average gain of 0.9 unit, from the initial assessment to the post assessment. The mean gain ranged from 0.6 to 1.0 unit with an average overall gain of 0.9 unit from the initial assessment to the longitudinal assessment.

Mean scores on each item of the rating scale are shown in Table XVI, Appendix C, pages 91-92, for non-participants and participants. The mean gain of participants from the initial assessment to the longitudinal assessment ranged from 0.6 to 1.0 unit with an average gain of 0.9 unit. The mean gain of participants over non-participants as measured by the longitudinal assessment ranged from 0.3 to 1.1 or an average of 0.7 unit.

III. IMPROVEMENT IN STUDENT KNOWLEDGE AND UNDERSTANDING OF VOCATIONAL EDUCATION

Student knowledge and understanding of vocational education was evaluated by administering a five-point rating scale to summer school students participating in the summer workshop at the beginning of their workshop experience and ten months later near the end of the 1971-72 school term. Because some of the workshop participants had withdrawn from school or been graduated before the longitudinal assessment, only 58 per cent of the original group was longitudinally assessed.

Table XVII, Appendix C, pages 93-94, shows the percentage of students rating their knowledge and understanding of vocational education average to excellent in the initial assessment and in the longitudinal assessment. On 5 of the 12 items, 75 per cent or better of the students rated themselves in the average to excellent category when initially assessed. In the longitudinal assessment, 75 per cent or better rated themselves in the average to excellent category on 8 of the 12 items. The highest gain (25 per cent) was on Item 12--programs and training offered at the career and technical education centers.

In Table XVIII, Appendix C, pages 95-96, are found the mean scores of students on each item in the Student Self-Rating Scale in Vocational Education and the difference in the initial and the longitudinal assessment scores for each item. Differences ranged from 0.1 to 0.7 making an overall gain of 0.3. Again, the highest gain was on Item 12--programs and training offered at the career and technical education centers.

IV. EFFECTIVENESS OF PROJECT IN LOWERING THE STUDENT DROPOUT RATE

The objective to reduce the number of dropouts in the secondary schools by one-half of one per cent of the enrollment was not realized for the school year 1971-72. The dropout rate increased one-half of one per cent over the previous year in Kanawha County secondary schools. It is believed that more rigid enforcement of the Board of Education policy pertaining to academic suspension, and lack of homebound instructional programs for all pregnant girls are responsible for the increase. This apparently counteracted any effect that Project CAP may have had on decreasing the dropout rate. It is anticipated that, with the full implementation of the individual school plans over a span of years, this objective will eventually be realized.

V. IMPROVEMENT OF STUDENT ATTITUDES TOWARD VOCATIONAL EDUCATION AND NON-PROFESSIONAL CAREERS

A definite change in student attitudes toward vocational education and non-professional careers was noted by several counselors. In one

school where the new plan was correlated with English and social studies, a sophomore English student expressed it this way in an English theme after touring the Franklin Center.

> Although there is not as much dignity in the trades as in the professions, I feel there should be. Without the many trades, both those shown at Ben Franklin as well as many others, it would hardly be possible for the professions to even exist. Where would the doctor be if there were no one to make his instruments, his office, or even his white robe and surgical gloves?

Awareness of students in the comprehensive high schools of the performances of Carver and Franklin students in the State Skill Contest for VICA (Vocational Industrial Clubs of America) also helped enhance student opinion of non-professional careers. Out of thirteen secondary level contests, Carver students won five first places, five second places, and three third places. Franklin students won three first places, three second places, and two third places. In addition, a Franklin student won first place in the FBLA (Future Business Leaders of America) contest in accounting held at Concord College.

VI. EFFECTIVENESS OF PROJECT IN INCREASING COUNSELOR USE OF RESOURCES

In implementing their individual school plans, both junior and senior high counselors organized tours of the two career and technical education centers for their students. They also involved many more persons from the two Centers, manpower agencies, and business and industry in their programs. For example, one senior high school conducted a "Career Fair" wherein steel scaffolding was used to erect thirty booths for students from the Franklin Center to demonstrate techniques and display materials used in their training programs. In the same fair, students from various departments in the high school presented information about careers related to their areas of study. The fair was video-taped and the tapes made available to interested groups.

Another high school had members of its journalism class interview personnel managers of two large companies. These interviews were reported in a special edition of the school paper published during National Vocational Guidance Week. A third high school had students tape interviews with persons actually working in various careers. Several schools organized tours to business and industry where students could observe workers on the job.

Due to the counselor contact with guidance materials in the Guidance Materials Resource Center at the summer workshop, greater use was made of such materials in implementing the individual school plan. Among new materials to which counselors were exposed in the Resource

Center were the WERC (Why Not Explore Rewarding Careers) film series and the World of Work tapes. Counselors using these in their programs were well pleased with student reaction to them.

VII. EFFECTIVENESS OF THE TWO-WEEK SUMMER TRAINING PROGRAM

Table XIX, Appendix C, pages 97-98, presents information pertaining to counselor evaluation of the two-week training program--its content and effectiveness. Mean scores for counselor ratings on the 18 items ranged from 3.36 to 4.97 units on the five-point rating scale in the initial assessment at the end of the two-week workshop. They ranged from 3.00 to 4.90 units ten months later on the longitudinal assessment. Mean differences ranged from -.36 to +.32 with an average mean difference of -0.8 between the initial assessment and post assessment.

Dividing the sum of the ratings for each item by the number of counselors rating the item multiplied by the highest rating (5), percentage of effectiveness for the item was determined. These percentages ranged from 67 to 99 in the initial assessment and from 60 to 98 in the post assessment. The mean difference ranged from -7 to +7 percentage points with an average difference of -1.4 between the initial assessment and the post assessment.

Counselors rated 14 of the 18 items above 75 per cent in both the initial and post assessments. Ratings of 90 per cent or above were noted in the following five areas:

1. Organization of Workshop (99 per cent IA; 98 per cent PA)
2. Work Sample Exposures (99 per cent IA; 94 per cent PA)
3. Overall Effectiveness of Program in Meeting Proposal Objectives (97 per cent IA; 92 per cent PA)
4. Field Trip to Union Carbide (94 per cent IA; 90 per cent PA)
5. Films from WERC Series--Why Not Explore Rewarding Careers (90 per cent IA; 91 per cent PA)

No program content or effectiveness area received a rating lower than 67 per cent in the initial assessment nor lower than 60 per cent in the post assessment.

Counselor participants reacted to the workshop program by writing their narrative comments to four questions. Numerous comments and statements were made. These comments and statements were summarized and grouped into the top three to five statements for each question.

The responses to the questions are listed below according to the rank order of the comments:

1. What did you like most about the workshop?

a. Work sample exposure with instructors from Carver Center
b. Attitude, cooperation and understanding of Carver faculty
c. Representatives from business, labor and manpower agencies
d. Fellowship and sharing with other counselor colleagues
e. Counseling with students

2. What did you like least about the workshop?

a. Individual school plan
b. Tight time schedule
c. Life Career Games

3. If this workshop were conducted again, what suggestions would you have for improving it?

a. More time for working on individual plans
b. More opportunity to work in groups
c. Additional time for presentation by representatives from business, industry and manpower agencies
d. More group counseling
e. Additional time for preview of materials

4. What was omitted from the program that could be included in KCPGA (Kanawha County Personnel and Guidance Association) monthly meetings?

a. Additional follow-up discussion regarding implementation of occupational guidance
b. Sessions for exchange of ideas
c. More involvement through "show and tell"
d. Additional rap sessions by division (i.e. junior high together and senior high together)
e. Tour of Carbide automated warehouse

VIII. EFFECTIVENESS OF IMPLEMENTATION OF OCCUPATIONAL GUIDANCE AND COUNSELING PLANS IN THE SCHOOLS

Reports from counselors at the close of the 1971-72 school year indicated that the plans developed furing the summer workshop were implemented fully or partially in twenty-six of the twenty-seven junior and senior high schools represented in the workshop. In some cases, it was necessary to delete portions of programs that proved overly ambitious. In other cases, it was difficult to fit the program into the school schedule, necessitating revisions in the original plan. In one instance, deletions were necessary in order to coordinate the program with Operation Guidance II, a new career research project introduced in the school after counselors had participated in the summer workshop. Even so, the two programs proved compatible, one complimenting the other.

Counselor summaries of their activities in the area of occupational guidance and counseling showed marked improvement in their awareness of vocational education and of non-professional careers. Overall, counselors considered implementation successful, making these observations:

1. More counseling was done in vocational education with real teacher involvement

2. More career materials were checked out of the guidance department by students

3. More students requested individual interviews with counselors after group guidance sessions pertaining to self-appraisal or to the world of work

4. Students and teachers developed an awareness of the program itself and of the world of work

5. Students became better acquainted with offerings of the two Career Centers

6. More representatives from business, industry, vocational schools, and government agencies were invited to participate in the guidance program

7. Student attitudes toward vocational education and non-professional careers changed in a positive direction

IX. REQUESTS FOR INFORMATION ABOUT PROJECT CAP

The State Director of Guidance invited one of the project directors to give an overview of Project CAP at the State Vocational Guidance Workshop held at the Cedar Lakes Conference Center, Ripley, West Virginia, in January 1972. Two of the project directors co-authored an article appearing in the West Virginia School Journal.[9] Several inquiries concerning the project have been received from professional persons as a result of the workshop presentation and the journal article.

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[9]David L. Acord and Virginia L. Robson, "Counselors Brought Up to Date in Vocational Education," West Virginia School Journal, 100:12-13, February, 1972.

CHAPTER IV

CONCLUSIONS

As a result of counselor participation in the two-week intensive training program, there was improvement in counselor knowledge and understanding of vocational education. This was evidenced by an average gain of 1.1 units on the five-point self-rating scale from the initial assessment to the post assessment and from the initial assessment to the longitudinal assessment. There was also improvement in counselor ability to help students make wise career decisions as shown by an average gain of 0.9 unit on the five-point self-rating scale from the initial assessment to the post assessment and from the initial assessment to the longitudinal assessment. There was no significant difference between average gain for junior high and senior high counselors in either case.

Further proof that participants improved their competence in the field of career guidance is found in the comparison of average mean scores of participants with those of non-participants. On improvement in counselor knowledge and understanding of vocational education, participants had an average mean score of 2.7 in the initial assessment while non-participants had an average mean score of 2.8. In the longitudinal assessment the average mean score for participants had risen to 3.8. On improvement in counselor ability to help students make wise career decisions, the initial assessment revealed an average mean score of 3.2 for participants and 3.4 for non-participants. In the longitudinal assessment, the average mean score for participants had increased to 4.1.

There was little improvement in knowledge and understanding of vocational education among summer school students who participated in the summer workshop. According to the initial and longitudinal assessments, the average mean gain was 0.3 unit on the five-point rating scale. Some of these students were not exposed to further occupational guidance and counseling in their home schools during the 1971-72 school term, because they were not included in the phase of the plan being implemented. For example, some schools are implementing their plans in three steps. They began implementation at the sophomore level the first year with the understanding that implementation would be extended to the junior level the second year, and to the senior level the third year. It is anticipated that full implementation of Project CAP plans will result in marked improvement in student knowledge and understanding of vocational education in the future and will eventually be instrumental in helping to lower the dropout rate. Project CAP has shown that a three-hour exposure to vocational education in a summer workshop may not make a significant contribution to a student's career education.

Even though students participating in the summer workshop may not have shown great improvement in knowledge and understanding of vocational

education, results obtained in an extensive evaluation of one school program attest to the fact that students can benefit from exposure to the new program. By means of a counselor-designed questionnaire, it was found that at least 85 per cent of the 252 participating sophomores could interpret accurately their own self-appraisal profiles pertaining to their abilities, achievement, work values, and personality traits as related to career choice at the end of a self-appraisal unit correlated with English. Using a true-false instrument designed by counselors in the school, student knowledge of the world of work was measured at the end of the world of work unit correlated with social studies. The mean score for the total group was 23.6 on the 30-item test, while the median score was 24. The correction for guessing formula (rights minus wrongs) was used in scoring the tests. The percentage of students giving correct responses to items in the test ranged from 99.6 per cent to 62.3 per cent. None of the 252 sophomores had participated in the summer workshop phase of Project CAP.

It may be concluded that the short-range goal of strengthening counselor competence in the area of vocational education and occupational guidance and counseling was attained. The long-range goal of helping students make wise career decisions cannot be adequately evaluated until counselors have had more time to transmit their updated knowledge to youth through full implementation of their new or revised plans of occupational guidance and counseling.

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[10] Summary and Evaluation of Activities Completed in 1971-72 at Dunbar High School under the Counselor Awareness Program for Vocational Education, (Dunbar, West Virginia: Dunbar High School Guidance Department, June, 1972), pp. 1-55. (Duplicated.)

CHAPTER V

RECOMMENDATIONS

Results of the Counselor Awareness Program for Vocational Education indicate some far reaching effects for guidance in the secondary schools of Kanawha County. Therefore, it is recommended that other school systems experiment with on-site, intensive, short-term training programs for counselors in career and technical education centers as a means of bridging an enormous gap in many guidance programs.

Counselor testimony regarding the unique feature of this project--the work sample exposure--indicates that more knowledge was garnered about careers and career training through this experience than had ever been gained through books or formal guidance classes. In view of this, it is recommended that Kanawha County Schools use the work sample exposure technique to familiarize counselors with career training programs at the Ben Franklin Center, and that they explore the possibility of extending its use to on-site, intensive, short-term training programs out in business and industry. Such counselor involvement in the career world should result in wiser career decisions on the part of students.

As a final recommendation, it is suggested that a federally-funded Counselor Awareness Program for Vocational Education be held in each of the regional career and technical education centers of the State in order to reach counselors on a state-wide basis.

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BIBLIOGRAPHY

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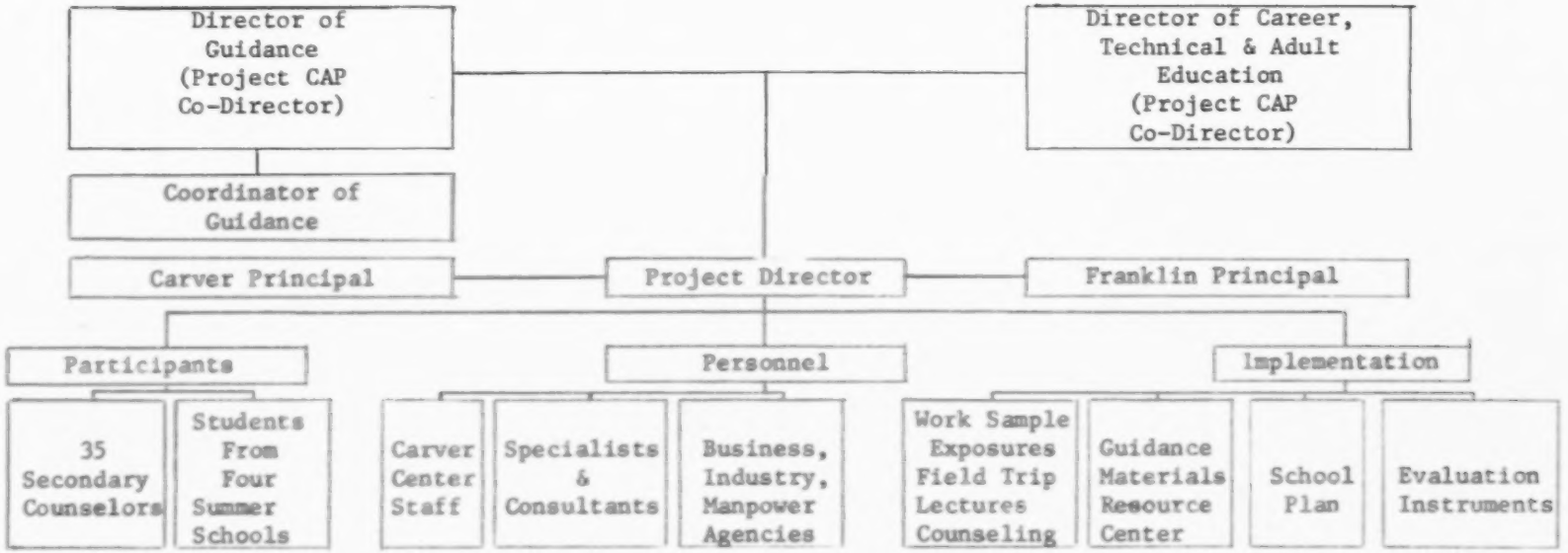
APPENDIX A: WORKSHOP DESIGN AND PROGRAM

26/2735

THE ADMINISTRATIVE DESIGN FOR
PROJECT CAP SUMMER WORKSHOP



Advisory Council

Associate Superintendent of Instruction
Assistant Superintendent of Pupil Services
Director of Guidance, Counseling & Testing
Director of Career, Technical and Adult Education
Coordinator of Testing & Evaluation
Principal, Carver Career & Technical Education Center
Principal, Benjamin Franklin Career & Technical Education Center
Project CAP Director
Representatives of Business & Industry

COUNSELOR AWARENESS PROJECT
WORKSHOP SCHEDULE
KANAWHA COUNTY SCHOOLS
July 6, 1971 - July 16, 1971

Tuesday, July 6

8:15- 8:30	Registration (Dining Hall, Room 105)
8:30- 9:00	Guided Tour of Carver Career and Technical Education Center Group A - Jim Dolan, Counselor, Carver Group B - Ernest Husson, Principal, Carver Group C - Charles Patrick, Coordinator, Carver
9:00- 9:30	Completion of pre-evaluation instruments - (Dining Hall, Room 105) Fred Radabaugh, Coordinator of Testing & Evaluation, Kanawha County Schools
9:30- 9:45	Introduction and orientation to workshop - (Virginia Robson, CAP Director, Clarence Burdette, CAP Co-Director and David Acord, CAP Co-Director)
9:45-10:30	"Innovations and Old Notions in Vocational Technical Education" - Dr. Theodore Cote, Temple University
10:30-10:45	BREAK
10:45-11:30	Reaction Panel Clarence Burdette, Chairman Dr. Jonell Kirby, WVU/Kanawha Valley Graduate Center Billie Davis, Counselor, Dunbar Jr. High School Ernest Husson, Counselor, Carver Career and Technical Education Center Betty Riley, Counselor, Montgomery High School
11:30-12:30	LUNCH
12:30- 1:30	Listening Teams (refer to sheet in packet for team assignments) Counselors will divide into five groups of seven counselors per group to react to speaker's presentation and panel comments. LISTENING TEAM I (Room 104): Discuss items presented in morning session with which they strongly disagree. LISTENING TEAM II (Room 107): Discuss items presented with which they strongly agree. LISTENING TEAM III (Room 101): Review that which was not said but should have been said. LISTENING TEAM IV (Room 103): Discuss items presented in morning session with which they strongly disagree. LISTENING TEAM V (Room 105): Review that which was not said but should have been said.
1:30- 2:00	Total group session (chairman of each group to give report regarding items discussed) - Dining Hall, Room 105

Tuesday, July 6 (continued)

2:00- 2:30	Question and discussion period
2:30- 3:30	Work Sample Exposure - Presentation by Carver instructors and on-site observation. (NOTE: See sheets in packet for Work Sample Exposure Group and Shop Area assignments)

Wednesday, July 7

8:30- 9:30	Introduction and orientation to occupational guidance materials in Resource Center - Dining Hall, Room 105 - Jim Dolan, Counselor, Carver, and Carolyn Skidmore, Media Specialist, Carver
9:30-10:15	Speech by consultant in occupational guidance. TOPIC: "Developing a Plan of Occupational Guidance and Counseling" - Dr. Jonell Kirby, Associate Professor, WVU
10:15-10:30	BREAK
10:30-11:30	Divide into work groups for development of Individual Plan
11:30-12:30	LUNCH
12:30- 2:30	Work on Individual School Plans under the supervision of Dr. Jonell Kirby and Dr. Theodore Cote
2:30- 3:30	Work Sample Exposure

Thursday, July 8

- 7:45	Depart from Carver for Carbide
- 8:00	Pick up participants at Board Office
- 8:30	Arrive at Carbide
8:30- 8:45	Plant Orientation, Room 104 - Henry Hill
8:45- 9:15	Tour of KVAC, typical clerical & accounting jobs, Room 6 - Bill Lewis
9:25- 9:45	Tour of Maintenance Shops, Room 307 - Bill Garrett
9:55-10:15	Tour of Drum Filling & Handling Unit & Tank Car/Truck Loading Unit, Room 303 - Jack Burgess
10:25-10:55	Tour of an Operating Unit, Room 195 - Hank Evers
11:00-11:20	Visit Plant Laboratory - Observe Lab Analyst, Room 106 - Bill Swango
11:30-12:00	*Tour of Automated Warehouse, Room 300 - O. K. McCallister
12:15- 1:15	LUNCH in Technical Center Cafeteria & Tour Wrap-up, Room 791- Frank Stowers
- 1:15	Depart from Carbide for Carver
- 1:45	Arrive at Carver
1:45- 3:30	Work Sample Exposure

*Cancelled due to lack of time

Friday, July 9

8:30-11:30	Consultant - Dr. Jonell Kirby, Associate Professor, WVU Dining Hall, Room 105 (A) Introduction to procedures for counseling and guidance activities (B) Demonstration in group counseling through test interpretation
9:45-10:00	BREAK
10:00-11:30	Questions and discussion related to above topics
11:30-12:30	LUNCH
12:30- 3:30	Work Sample Exposure

Saturday, July 10

8:30-11:30	Presentation by consultant on programs and program ideas Dr. Thomas Sweeney, University of South Carolina (A) Ideas that counselors can use - Life Career Games, films, etc. (B) Practicum in Life Career Games
9:45-10:00	BREAK
11:30-12:30	LUNCH
12:30- 3:30	Work on developing Individual School Plans under the supervision of Dr. Sweeney (NOTE: Preliminary draft due Monday, July 12, 8:30 a.m.)

Monday, July 12

8:30- 8:45	Turn in preliminary draft of individual school plan to Virginia Robson, CAP Project Director, Dining Hall, Room 105
8:45- 9:45	Video Tape - Jim Dolan & Carver students - World of Work Tapes
9:45-10:00	BREAK
10:00-11:30	Group guidance and counseling with Carver students by counselor participants (NOTE: See schedule for room and student assignment)
11:30-12:30	LUNCH
12:30- 1:30	Presentation by representatives from business (Columbia Gas, Sears Roebuck, Business Computers Systems, C&P Telephone Company, Electronic Specialty Company) Clarence Burdette, CAP Co-Director, Dining Hall, Room 105
1:30- 3:30	Work Sample Exposure

Tuesday, July 13

8:30- 9:45	Presentation by representatives from industry (AFL-CIO, Mid Ohio Valley Industrial Council, Carbon Fuel, U.S. Bureau of Apprenticeship Training) Clarence Burdette, CAP Co-Director, Dining Hall, Room 105

Tuesday, July 13 (continued)

9:45-10:00	BREAK
10:00-10:30	Feedback Session on Individual Plan - Dr. Jonell Kirby
10:30-11:30	Work on Individual School Plan
11:30-12:30	LUNCH
12:30- 3:30	Work Sample Exposure

Wednesday, July 14

8:30-11:30	Counselor conducted group tours and group sessions for Herbert Hoover High School students. Approximately five students per counselor (See schedule for Room and student assignment)
9:45-10:00	BREAK
11:30-12:30	LUNCH
12:30- 2:00	Presentation by manpower agencies: Employment Security, Vocational Rehabilitation, OIC, Multi-CAP, Job Corps, Clarence Burdette, CAP Co-Director, Dining Hall, Room 105
2:00- 3:30	Work Sample Exposure

Thursday, July 15

8:30-11:30	Counselor conducted group tours and group sessions for Charleston High and East Bank High and Franklin students. Approximately five students per counselor (NOTE: See schedule for Room and student assignment)
9:45-10:00	BREAK
11:30-12:30	LUNCH
12:30- 2:30	Work on Individual School Plan
2:30- 3:30	Work Sample Exposure

Friday, July 16

8:30- 9:45	"Show and Tell" - Review of occupational guidance and counseling plans for counselors' respective schools.
9:45-10:00	BREAK
10:00-11:30	Options (Do Two) Additional Work Sample Exposure Work in Guidance Materials Resource Center Counsel with a Carver student
11:30-12:30	LUNCH

Friday, July 16 (continued)

12:30- 1:30	Presentations by representatives from Adult Education programs: Ernest Husson, Principal, Carver Tom Hill, Assistant Director of Adult Education Charles Patrick, Coordinator, Carver Harold Walker, Coordinator of Business Education, Adult Education Robert Walters, Coordinator, MDTA Retraining Program
1:30- 2:00	Evaluation (A) Completion of post-evaluation instruments (B) Comments by participants
2:00- 3:00	Social Hour CAP participants Carver staff Franklin staff

CAP WORKSHOP
Work Sample Exposure Schedule
July 6-16, 1971

Date	Time	Group	Work Sample	Room No.
July 6	2:30	A	Auto Mechanics	
		B	Auto Body Repair	
		C	Electricity	
July 7	2:30	A	Electronics	
		B	Mine Maintenance	
		C	Industrial Maintenance	
July 8	1:30	A	Building Maintenance	
		B	Welding	
		C	Building Construction	
July 8	2:30	A	Drafting Technology	
		B	Data Processing	
		C	Machine Accounting	
July 9	12:30	A	Distributive Education	
		B	Cosmetology	
		C	Dental Assistant	
July 9	1:30	A	Ornamental Horticulture	See Map
		B	Commercial Foods	
		C	Auto Mechanics	
July 9	2:30	A	Auto Body Repair	
		B	Electricity	
		C	Electronics	
July 12	1:30	A	Mine Maintenance	
		B	Industrial Maintenance	
		C	Building Maintenance	
July 12	2:30	A	Welding	
		B	Building Construction	
		C	Drafting Technology	
July 13	12:30	A	Data Processing	
		B	Machine Accounting	
		C	Distributive Education	

Work Sample Exposure Schedule (continued)

Date	Time	Group	Work Sample	Room No.
July 13	1:30	A	Cosmetology	
		B	Dental Assistant	
		C	Ornamental Horticulture	
July 13	2:30	A	Commercial Foods	
		B	Auto Mechanics	
		C	Auto Body Repairs	
July 14	2:00	A	Electricity	
		B	Electronics	
		C	Mine Maintenance	
July 14	2:45	A	Industrial Maintenance	
		B	Building Maintenance	
		C	Data Processing	
July 15	2:30	A	Machine Accounting	
		B	Distributive Education	
		C	Cosmetology	
July 16	10:00 11:30		Option of one or two additional Work Sample Exposures	

See Map

PARTICIPANTS IN COUNSELOR AWARENESS (CAP) WORKSHOP

High School

1. Virginia Robson, Dunbar High School (CAP Project Director)
2. Cheatham Alston, Stonewall Jackson High School
3. Sarah Ash, St. Albans High School
4. Randall Bowles, George Washington High School
5. Maylene Brabban, St. Albans High School
6. Paul Brannon, East Bank High School
7. Mendel Carp, Charleston High School
8. Marvin Covey, South Charleston High School
9. William Craigo, St. Albans High School
10. Edith Farley, Dunbar High School
11. Margaret Hudson, Nitro High School
12. Patsy Hughey, East Bank High School
13. Donald Pauley, St. Albans High School
14. Betty Riley, Montgomery High School (Fayette County)
15. Constance Robertson, Gauley Bridge High School (Fayette County)
16. James Simmons, South Charleston High School
17. Robert Smith, DuPont High School
18. Sid Stephenson, Sissonville High School
19. Margaret Wilmoth, Nitro High School

Career & Technical Education Centers

1. Jimmy Dolan, Carver Career & Technical Education Center
2. Hubert Moore, Benjamin Franklin Career & Technical Education Center

Junior High School

1. Victor Asseff, Roosevelt Jr. High School
2. Thomas Bailey, McKinley Jr. High School
3. Jo Ann Barrett, DuPont Jr. High School
4. Genette Bunn, Washington Jr. High School
5. Billie Davis, Dunbar Jr. High School
6. Ellen Doll, Woodrow Wilson Jr. High School
7. Lucille Gillispie, Elkview Jr. High School
8. Roberta Hays, Spring Hill Jr. High School
9. Patricia Holland, Lincoln Jr. High School
10. Julia Kelly, Nitro Jr. High School
11. Bernice Lake, Clendenin Jr. High School
12. Hester Lyman, Cedar Grove Community School
13. Edward Perrow, Andrew Jackson Jr. High School
14. Reba Perrow, Andrew Jackson Jr. High School
15. Althia Tyson, John Adams Jr. High School
16. Mary Trotter, Thomas Jefferson Jr. High School

CAP Workshop Participants (continued)

Kanawha County School Personnel

1. David L. Acord, Director of Guidance, Counseling and Testing
2. Clarence Burdette, Director of Career, Technical, & Adult Education
3. William Calhoun, Principal, Benjamin Franklin Career & Technical Education Center
4. Tom Hill, Assistant Director of Career, Technical & Adult Education
5. Ernest Husson, Principal, Carver Career & Technical Education Center
6. Charles Patrick, Coordinator, Carver Career & Technical Education Center
7. Fred Radabaugh, Coordinator of Testing & Evaluation
8. John Santrock, Associate Superintendent of Instruction
9. James Smith, Assistant Superintendent of Pupil Services
10. Harold Walker, Coordinator of Adult Education
11. Total staff, Carver Career & Technical Education Center

State Department of Education Personnel

1. Fred Eberle, Assistant Superintendent, Bureau of Vocational, Technical and Adult Education
2. George James, Statistician
3. Ray Miller, Supervisor of Testing
4. Mike Murphy, Supervisor of Private School Certification and Licensure
5. Glenn Smith, Marshall University/Research Coordinating Unit
6. Keith Smith, Supervisor of Vocational Guidance

College and University Personnel

1. Dr. Theordore Cote, Temple University
2. Dr. Charles Jones, Marshall University
3. Dr. Jonell Kirby, WVU/Kanawha Valley Graduate Center
4. Dr. Thomas Sweeney, University of South Carolina

Consultants from Business, Industry, Unions, State & Federal Government Agencies

1. Jack Burgess, Union Carbide
2. Jim Cerra, Mid Ohio Valley Industrial Council
3. Hank Evers, Union Carbide
4. Bill Garrett, Union Carbide
5. Fayelda Griffith, Vocational Rehabilitation
6. Stewart Harris, Columbia Gas
7. Henry Hill, Union Carbide
8. Jesse James, U. S. Bureau of Apprenticeship Training
9. Harry Janey, AFL-CIO
10. Bill Lewis, Union Carbide
11. O. K. McCallister, Union Carbide

CAP Workshop Participants (continued)

Consultants from Business, Industry, Unions, State & Federal Government Agencies (continued)

12. Venell Magginson, OIC
13. George Moore, Charleston Job Corps Center for Women
14. Irene Parks, Sears, Roebuck & Company
15. Robert Payne, Business Computers Systems
16. Jeanene Salyers, C & P Telephone Company
17. Henry Seale, OIC
18. Cam Sellers, C & P Telephone Company
19. Louise Sleeman, W. Va. Department of Employment Security
20. Lee Stephens, Columbia Gas
21. Bill Swango, Union Carbide
22. Dan Toney, Carbon Fuel
23. Warren Thuston, Multi-CAP
24. Robert Walters, Kanawha County Schools (MDTA Program)
25. James Wolford, Electronic Specialty Company

APPENDIX B: EVALUATION INSTRUMENTS

COUNSELOR SELF-RATING SCALE IN VOCATIONAL EDUCATION

Directions

This self-rating scale consists of 22 items designed to sample counselor knowledge and understanding of vocational education and 10 items designed to sample counselor ability in helping students make wise career decisions. Read each statement carefully and then indicate your self-rating by recording the appropriate number in the column to the left of each statement. Use the rating scale indicated below:

RATING SCALE: 1-Low, 2-Below Average, 3-Average, 4-Above Average, 5-Excellent

Part A: I would rate my knowledge and understanding of:

_____ 1. The world of work as it relates to advising students in vocational and career decisions

_____ 2. The overall occupational picture, i.e. the major groups of workers and employment trends within these groups.

_____ 3. Population shifts and job mobility.

_____ 4. Minority group job problems

_____ 5. Work content (the duties performed and materials used) of various occupations.

_____ 6. Motivation of students toward the world of work.

_____ 7. Prerequisites (aptitudes, interests, personality traits, and training) required for success in different vocational areas

8. Services provided by the following manpower agencies:

_____ (a) Employment Security
_____ (b) Opportunities Industrialization Center (OIC)
_____ (c) Multi-CAP
_____ (d) Job Corps
_____ (e) CAMPS

_____ 9. AFL-CIO Union requirements for certain trades and professions.

_____10. Available resource materials for vocational-technical education and vocational guidance.

COUNSELOR SELF-RATING SCALE (continued)

_____11. Appropriate procedures to follow in making referrals to different manpower agencies.

_____12. Requirements for entry level job skills in the various vocational-technical areas.

_____13. Basic principles utilized in the teaching of job skills.

_____14. The levels of learning within a specific job cluster.

15. Values to be gained from student work programs such as:

_____ (a) NYC
_____ (b) Cooperative programs with business and industry
_____ (c) DE
_____ (d) MDTA
_____ (e) OJT

16. Employment opportunities in various occupational areas at the:

_____ (a) Local Level
_____ (b) State Level
_____ (c) National Level

_____17. Post-secondary and adult programs available to students in Kanawha County.

_____18. Procedures to follow in obtaining work permits.

_____19. Minimum wage/hour law requirements.

_____20. Wage scales for different jobs.

_____21. Community resource persons available to participate in the occupational guidance program at my school.

_____22. Understanding of the personality traits that will enable students to work harmonously with others in different vocational areas.

PART B: I would rate my ability to:

_____ 1. Counsel students wisely on career decisions.

_____ 2. Help students understand the meaning of vocational training programs.

_____ 3. Correlate vocational training with academic school subjects.

COUNSELOR SELF-RATING SCALE (continued)

_____ 4. Help students see that there is dignity and worth in all occupations whether they be professional or non-professional

_____ 5. Help students identify their strongest needs and to select occupations that can help satisfy some of these needs

_____ 6. Help students develop an awareness of the psychological and social satisfactions that can be found in various occupations

_____ 7. Communicate to students that career selection is a developmental process requiring long-range thinking and planning

_____ 8. Help students identify and assess their aptitudes, interests, personality traits, and values so that they can make better career decisions

_____ 9. Motivate classroom teachers to explore with their students those occupations related to their subjects

_____10. Spearhead the planning and executing of a vocational guidance program in my school

DLA:VLR:CEB/sj1
7/6/71

STUDENT SELF-RATING SCALE
IN
VOCATIONAL EDUCATION

NAME _____

SCHOOL (Home) _____

My Main Career Interest Is _____

Directions

This self-rating scale consists of 12 items designed to sample student knowledge and understanding of vocational education and sample student knowledge on where to obtain information concerning careers and jobs.

RATING SCALE: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low

SOURCES(S): Please circle those appropriate

I would rate my knowledge and understanding of:

_____ 1. The world of work as it relates to my major career interest

Source(s) of Information:

A. Counselor	D. Films, Books, Pamphlets, Tapes
B. Teacher	E. Other
C. Person in the Career	F. Career Week/Day

_____ 2. The overall occupational picture, i.e. the major groups of workers and employment trends within my chosen career

Source(s) of Information:

A. Counselor	D. Films, Books, Pamphlets, Tapes
B. Teacher	E. Other
C. Person in the Career	F. Career Week/Day

_____ 3. The population shifts and job mobility

Source(s) of Information:

A. Counselor	D. Films, Books, Pamphlets, Tapes
B. Teacher	E. Other
C. Person in the Career	F. Career Week/Day

_____ 4. Work content (the duties performed and materials used) of various occupations

Source(s) of Information:

A. Counselor	D. Films, Books, Pamphlets, Tapes
B. Teacher	E. Other
C. Person in the Career	F. Career Week/Day

_____ 5. Prerequisites required for success in different vocational areas (aptitudes, interests, personality traits, and training).

Source(s) of Information:

A. Counselor	D. Films, Books, Pamphlets, Tapes
B. Teacher	E. Other
C. Person in the Career	F. Career Week/Day

6. Services provided by manpower agencies:

_____ (a) Employment Security
_____ (b) Opportunities Industrialization Center (OIC)
_____ (c) Multi-CAP
_____ (d) Job Corps

Source(s) of Information:

A. Counselor	D. Films, Books, Pamphlets, Tapes
B. Teacher	E. Other
C. Person in the Career	F. Career Week/Day

_____ 7. Union requirements for certain trades and crafts.

Source(s) of Information:

A. Counselor	D. Films, Books, Pamphlets, Tapes
B. Teacher	E. Other
C. Person in the Career	F. Career Week/Day

_____ 8. Post-secondary and adult programs available to students in Kanawha County

Source(s) of Information:

A. Counselor	D. Films, Books, Pamphlets, Tapes
B. Teacher	E. Other
C. Person in the Career	F. Career Week/Day

_____ 9. Procedure in obtaining a work permit.

Source(s) of Information:

A. Counselor	D. Films, Books, Pamphlets, Tapes
B. Teacher	E. Other
C. Person in the Career	F. Career Week/Day

_____10. Wage scales for different jobs

Source(s) of Information:

A. Counselor	D. Films, Books, Pamphlets, Tapes
B. Teacher	E. Other
C. Person in the Career	F. Career Week/Day

11. Employment opportunities in various occupational areas at the

_____ (a) Local Level
_____ (b) State Level
_____ (c) National Level

Source(s) of Information:

A. Counselor	D. Films, Books, Pamphlets, Tapes
B. Teacher	E. Other
C. Person in the Career	F. Career Week/Day

12. Programs and training offered at the Career and Technical Education Centers

_____ (a) Benjamin Franklin
_____ (b) Carver

Source(s) of Information:

A. Counselor	D. Films, Books, Pamphlets, Tapes
B. Teacher	E. Other
C. Person in the Career	F. Career Week/Day

PROGRAM CONTENT AND EFFECTIVENESS
CAP EVALUATION

Please rate the following items using the rating scale:

1-Low, 2-Below Average, 3-Average, 4-Above Average, 5-Excellent

_____ 1. Consultants from Universities

_____ 2. "Quickie Tour of Carver"

_____ 3. Work Sample Exposures

_____ 4. Individual Plan of Occupational Guidance

_____ 5. Representatives from Business

_____ 6. Representatives from Apprenticeships, Labor and Unions

_____ 7. Representatives from Manpower Agencies

_____ 8. Field Trip to Union Carbide

_____ 9. Group Guidance in Test Interpretation (Video Taped)

_____10. World of Work Tapes (Video Taped)

_____11. Listening Teams

_____12. Life Career Games

_____13. Guidance Materials Resource Center

_____14. Films from WERC Series

_____15. Counseling with Students from Summer Schools

_____16. Small Group Sessions with Counselors

_____17. Organization of Workshop

_____18. Overall Effectiveness of Program in Meeting Proposal Objectives to Date

APPENDIX C: TABLES

TABLE I

ANALYSIS OF SENIOR HIGH COUNSELORS' KNOWLEDGE AND UNDERSTANDING OF VOCATIONAL EDUCATION
(PART I)

Item in Counselor Self-Rating Scale in Vocational Education, Part A (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their knowledge and understanding above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
Knowledge and understanding of:					
1. The world of work as it relates to advising students in vocational and career decisions.	34	95	95	61	61
2. The overall occupational picture, i.e. the major groups of workers and employment trends within these groups.	14	76	76	62	62
3. Population shifts and job mobility.	10	34	48	24	38
4. Minority group job problems.	14	52	48	38	34
5. Work content (The duties performed and materials used) of various occupations.	39	91	71	52	32
6. Motivation of students toward the world of work.	19	90	71	71	52
7. Prerequisites (aptitudes, interests, personality traits, and training) required for success in different vocational areas.	24	91	95	67	71
8. Services provided by the following manpower agencies:					
a) Employment Security	33	100	95	67	62
b) Opportunities Industrialization Center (OIC)	10	81	67	71	57
c) Multi-CAP	5	62	24	57	19
d) Job Corps	24	86	67	62	43
e) CAMPS	14	47	24	33	10
9. AFL-CIO Union Requirements for certain trades and professions.	15	62	38	47	23

TABLE I (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their knowledge and understanding above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
10. Available resource materials for vocational technical education and vocational guidance.	29	100	100	71	71
11. Appropriate procedures to follow in making referrals to different manpower agencies.	10	71	67	61	57
12. Requirements for entry level job skills in the various vocational technical areas	15	81	57	66	42
13. Basic principles utilized in the teaching of job skills	10	66	62	56	52
14. The levels of learning within a specific job cluster	19	67	57	48	38
15. Values to be gained from student work programs such as:					
a) NYC	52	67	100	15	48
b) Cooperative programs with business and industry	47	76	86	29	39
c) DE	38	76	81	38	43
d) MDTA	10	52	43	42	33
e) OJT	29	52	52	23	23
16. Employment opportunities in various occupational areas at the:					
a) Local Level	24	62	81	38	57
b) State Level	14	53	43	39	29
c) National Level	10	48	33	38	23
17. Post-secondary and adult programs available to students in Kanawha County	43	96	100	53	57
18. Procedures to follow in obtaining work permits.	86	91	100	5	14

TABLE I (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their knowledge and understanding above average to excellent			Percent of gain	
	IA	PA	LA	PA over IA	LA over IA
19. Minimum wage/hour law requirements.	29	66	76	37	47
20. Wage scales for different jobs.	10	53	48	43	38
21. Community resource persons available to participate in the occupational guidance program at my school.	29	95	81	66	52
22. Understanding of the personality traits that will enable students to work harmonously with others in different vocational areas.	34	86	86	52	52

Legend

IA - Initial Assessment
PA - Post Assessment
LA - Longitudinal Assessment

TABLE II

ANALYSIS OF JUNIOR HIGH COUNSELORS' KNOWLEDGE AND UNDERSTANDING OF VOCATIONAL EDUCATION
(PART I)

Item in Counselor Self-Rating Scale in Vocational Education, Part A (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their knowledge and understanding above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
Knowledge and understanding of:					
1. The world of work as it relates to advising students in vocational and career decisions.	25	94	88	69	63
2. The overall occupational picture, i.e. the major groups of workers and employment trends within these groups.	13	56	75	43	62
3. Population shifts and job mobility.	6	38	50	32	44
4. Minority group job problems.	13	44	47	31	34
5. Work content (the duties performed and materials used) of various occupations.	13	88	63	75	50
6. Motivation of students toward the world of work.	37	88	75	51	38
7. Prerequisites (aptitudes, interests, personality traits, and training) required for success in different vocational areas.	19	81	69	62	50
8. Services provided by the following manpower agencies:					
a) Employment Security	12	100	69	88	57
b) Opportunities Industrialization Center (OIC)	6	75	25	69	19
c) Multi-CAP	19	75	25	56	6
d) Job Corps	25	94	69	69	44
e) CAMPS	19	25	19	6	0
9. AFL-CIO Union Requirements for certain trades and professions.	6	63	25	57	19

TABLE II (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their knowledge and understanding above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
10. Available resource materials for vocational technical education and vocational guidance.	31	100	88	69	57
11. Appropriate procedures to follow in making referrals to different manpower agencies.	6	75	38	69	32
12. Requirements for entry level job skills in the various vocational technical areas.	0	82	50	82	50
13. Basic principles utilized in the teaching of job skills.	6	88	69	82	63
14. The levels of learning within a specific job cluster.	0	69	69	69	69
15. Values to be gained from student work programs such as:					
a) NYC	44	82	88	38	44
b) Cooperative programs with business and industry	25	69	63	44	38
c) DE	12	87	27	75	15
d) MDTA	12	63	27	51	15
e) OJT	19	76	47	57	28
16. Employment opportunities in various occupational areas at the:					
a) Local Level	6	75	63	69	57
b) State Level	6	50	50	44	44
c) National Level	6	25	25	19	19
17. Post-secondary and adult programs available to students in Kanawha County.	31	100	100	69	69
18. Procedures to follow in obtaining work permits.	75	88	94	13	19

TABLE II (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their knowledge and understanding above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
19. Minimum wage/hour law requirements.	13	63	81	50	68
20. Wage scales for different jobs.	0	69	38	69	38
21. Community resource persons available to participate in the occupational guidance program at my school.	44	100	94	56	50
22. Understanding of the personality traits that will enable students to work harmonously with others in different vocational areas.	44	94	88	50	44

Legend

IA - Initial Assessment
PA - Post Assessment
LA - Longitudinal Assessment

TABLE III

ANALYSIS OF SECONDARY COUNSELORS' KNOWLEDGE AND UNDERSTANDING OF VOCATIONAL EDUCATION
(PART I)

Item in Counselor Self-Rating Scale in Vocational Education, Part A (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their knowledge and understanding above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
Knowledge and understanding of:					
1. The world of work as it relates to advising students in vocational and career decisions.	30	95	92	65	62
2. The overall occupational picture, i.e. the major groups of workers and employment trends within these groups.	14	68	76	54	62
3. Population shifts and job mobility.	8	35	49	27	41
4. Minority group job problems.	14	49	47	35	33
5. Work content (the duties performed and materials used) of various occupations.	27	89	68	62	41
6. Motivation of students toward the world of work.	27	89	73	62	46
7. Prerequisites (aptitudes, interests, personality traits, and training) required for success in different vocational areas.	22	87	83	65	61
8. Services provided by the following manpower agencies:					
a) Employment Security	25	100	84	75	59
b) Opportunities Industrialization Center (OIC)	8	76	68	70	60
c) Multi-CAP	5	68	24	63	19
d) Job Corps	25	89	68	64	43
e) CAMPS	16	38	22	22	6
9. AFL-CIO Union Requirements for certain trades and professions.	11	62	32	51	21

TABLE III (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their knowledge and understanding above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
10. Available resource materials for vocational technical education and vocational guidance.	29	100	94	71	65
11. Appropriate procedures to follow in making referrals to different manpower agencies.	8	73	54	65	46
12. Requirements for entry level job skills in the various vocational technical areas.	8	81	54	73	46
13. Basic principles utilized in the teaching of job skills.	8	76	65	68	57
14. The levels of learning within a specific job cluster.	11	68	62	57	51
15. Values to be gained from student work programs such as:					
a) NYC	49	73	94	24	45
b) Cooperative programs with business and industry	38	73	75	35	37
c) DE	27	81	58	54	31
d) MDTA	10	57	36	47	26
e) OJT	24	62	50	38	26
16. Employment opportunities in various occupational areas at the:					
a) Local Level	17	68	73	51	56
b) State Level	11	51	46	40	35
c) National Level	8	38	29	30	21
17. Post-secondary and adult programs available to students in Kanawha County.	38	97	100	59	62
18. Procedures to follow in obtaining work permits.	81	89	97	8	16

TABLE III (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their knowledge and understanding above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
19. Minimum wage/hour law requirements.	22	65	78	43	56
20. Wage scales for different jobs.	6	60	43	54	37
21. Community resource persons available to participate in the occupational guidance program at my school.	35	97	86	62	51
22. Understanding of the personality traits that will enable students to work harmonously with others in different vocational areas.	38	89	87	51	49

Legend

IA - Initial Assessment
PA - Post Assessment
LA - Longitudinal Assessment

TABLE IV

COMPARISON OF PARTICIPANTS' KNOWLEDGE AND UNDERSTANDING OF VOCATIONAL EDUCATION WITH THAT OF NON-PARTICIPANTS
(PART I)

Item in Counselor Self-Rating Scale in Vocational Education, Part A (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their knowledge and understanding above average to excellent			Per cent of gain	
	NPA	IA	LA	LA over IA	LA over NPA
Knowledge and understanding of:					
1. The world of work as it relates to advising students in vocational and career decisions.	22	30	92	62	70
2. The overall occupational picture, i.e. the major groups of workers and employment trends within these groups.	11	14	76	62	65
3. Population shifts and job mobility.	17	8	49	41	32
4. Minority group job problems.	33	14	47	33	14
5. Work content (the duties performed and materials used) of various occupations.	17	27	68	41	51
6. Motivation of students toward the world of work.	35	27	73	46	38
7. Prerequisites (aptitudes, interests, personality traits, and training) required for success in different vocational areas.	22	22	83	61	61
8. Services provided by the following manpower agencies:					
a) Employment Security	39	25	84	59	45
b) Opportunities Industrialization Center (OIC)	17	8	68	60	51
c) Multi-CAP	0	5	24	19	24
d) Job Corps	17	25	68	43	51
e) CAMPS	11	16	22	6	11
9. AFL-CIO Union Requirements for certain trades and professions.	6	11	32	21	26

TABLE IV (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their knowledge and understanding above average to excellent			Per cent of gain	
	NPA	IA	LA	LA over IA	LA over NPA
10. Available resource materials for vocational technical education and vocational guidance.	22	29	94	65	72
11. Appropriate procedures to follow in making referrals to different manpower agencies.	11	8	54	46	43
12. Requirements for entry level job skills in the various vocational technical areas.	11	8	54	46	43
13. Basic principles utilized in the teaching of job skills.	22	8	65	57	43
14. The levels of learning within a specific job cluster.	11	11	62	51	51
15. Values to be gained from student work programs such as:					
a) NYC	39	49	94	45	55
b) Cooperative programs with business and industry	28	38	75	37	47
c) DE	17	27	58	31	41
d) MDTA	6	10	36	26	30
e) OJT	6	24	50	26	44
16. Employment opportunities in various occupational areas at the:					
a) Local Level	17	17	73	56	56
b) State Level	17	11	46	35	29
c) National Level	17	8	29	21	12
17. Post-secondary and adult programs available to students in Kanawha County.	33	38	100	62	67
18. Procedures to follow in obtaining work permits.	50	81	97	16	47

TABLE IV (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their knowledge and understanding above average to excellent			Per cent of gain	
	NPA	IA	LA	LA over IA	LA over NPA
19. Minimum wage/hour law requirements.	22	22	78	56	56
20. Wage scales for different jobs.	6	6	43	37	37
21. Community resource persons available to participate in the occupational guidance program at my school.	22	35	86	51	64
22. Understanding of the personality traits that will enable students to work harmonously with others in different vocational areas.	33	38	87	49	54

Legend

NPA - Non-Participant Assessment
IA - Initial Assessment
LA - Longitudinal Assessment

TABLE V

ANALYSIS OF SENIOR HIGH COUNSELORS' KNOWLEDGE AND UNDERSTANDING OF VOCATIONAL EDUCATION (PART II)

Item in Counselor Self-Rating Scale in Vocational Education, Part A	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
Knowledge and understanding of:					
1. The world of work as it relates to advising students in vocational and career decisions.	3.1	4.1	4.0	+1.0	+0.9
2. The overall occupational picture, i.e. the major groups of workers and employment trends within these groups.	2.8	4.0	4.0	+1.2	+1.2
3. Population shifts and job mobility.	2.7	3.4	3.7	+0.7	+1.0
4. Minority group job problems.	2.7	3.7	3.5	+1.0	+0.8
5. Work content (the duties performed and materials used) of various occupations.	3.1	4.2	4.0	+1.1	+0.9
6. Motivation of students toward the world of work.	3.0	4.0	3.8	+1.0	+0.8
7. Prerequisites (aptitudes, interests, personality traits, and training) required for success in different vocational areas.	3.0	4.1	4.3	+1.1	+1.3
8. Services provided by the following manpower agencies:					
a) Employment Security	3.3	4.3	4.3	+1.0	+1.0
b) Opportunities Industrialization Center (OIC)	2.1	4.0	3.9	+1.9	+1.8
c) Multi-CAP	1.8	3.6	3.2	+1.8	+1.4
d) Job Corps	3.1	4.1	4.0	+1.0	+0.9
e) CAMPS	2.1	3.3	3.0	+1.2	+0.9
9. AFL-CIO Union Requirements for certain trades and professions.	2.2	3.7	3.4	+1.5	+1.2

TABLE V (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
10. Available resource materials for vocational technical education and vocational guidance.	3.0	4.3	4.2	+1.3	+1.2
11. Appropriate procedures to follow in making referrals to different manpower agencies.	2.5	3.9	3.9	+1.4	+1.4
12. Requirements for entry level job skills in the various vocational technical areas	3.1	4.1	3.8	+1.0	+0.7
13. Basic principles utilized in the teaching of job skills.	2.7	3.8	3.9	+1.1	+1.2
14. The levels of learning within a specific job cluster.	2.6	3.9	3.7	+1.3	+1.1
15. Values to be gained from student work programs such as:					
a) NYC	3.6	3.9	4.5	+0.3	+0.9
b) Cooperative programs with business and industry	3.4	4.0	4.3	+0.6	+0.9
c) DE	3.0	4.0	4.1	+1.0	+1.1
d) MDTA	2.2	3.6	3.4	+1.4	+1.2
e) OJT	2.7	3.6	3.5	+0.9	+0.8
16. Employment opportunities in various occupational areas at the:					
a) Local Level	2.0	3.7	4.0	+1.7	+2.0
b) State Level	2.6	3.6	3.4	+1.0	+0.8
c) National Level	2.5	3.4	3.3	+0.9	+0.8
17. Post-secondary and adult programs available to students in Kanawha County.	3.5	4.4	4.7	+0.9	+1.2
18. Procedures to follow in obtaining work permits.	4.1	4.6	4.8	+0.5	+0.7

TABLE V (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
19. Minimum wage/hour law requirements.	3.1	3.8	4.0	+0.7	+0.9
20. Wage scales for different jobs.	2.7	3.6	3.4	+0.9	+0.7
21. Community resource persons available to participate in the occupational guidance program at my school.	2.8	4.2	4.1	+1.4	+1.3
22. Understanding of the personality traits that will enable students to work harmonously with others in different vocational areas.	3.1	4.1	4.2	+1.0	+1.1

Legend

IA - Initial Assessment
PA - Post Assessment
LA - Longitudinal Assessment

TABLE VI

ANALYSIS OF JUNIOR HIGH COUNSELORS' KNOWLEDGE AND UNDERSTANDING OF VOCATIONAL EDUCATION (PART II)

Item in Counselor Self-Rating Scale in Vocational Education, Part A	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
Knowledge and understanding of:					
1. The world of work as it relates to advising students in vocational and career decisions.	2.9	4.1	4.0	+1.2	+1.1
2. The overall occupational picture, i.e. the major groups of workers and employment trends within these groups.	2.8	3.6	3.8	+0.8	+1.0
3. Population shifts and job mobility.	2.5	3.5	3.5	+1.0	+1.0
4. Minority group job problems.	2.5	3.2	3.5	+0.7	+1.0
5. Work content (the duties performed and materials used) of various occupations.	2.4	4.1	3.9	+1.7	+1.5
6. Motivation of students toward the world of work.	3.3	4.0	3.8	+0.7	+0.5
7. Prerequisites (aptitudes, interests, personality traits, and training) required for success in different vocational areas.	2.8	4.1	3.8	+1.3	+1.0
8. Services provided by the following manpower agencies:					
a) Employment Security	2.8	4.2	3.8	+1.4	+1.0
b) Opportunities Industrialization Center (OIC)	1.8	3.8	3.3	+2.0	+1.5
c) Multi-CAP	1.8	3.8	3.2	+2.0	+1.4
d) Job Corps	2.9	4.1	3.8	+1.2	+0.9
e) CAMPS	2.4	2.9	3.1	+0.5	+0.7
9. AFL-CIO Union Requirements for certain trades and professions.	2.0	3.6	3.0	+1.6	+1.0

TABLE VI (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
10. Available resource materials for vocational technical education and vocational guidance.	3.1	4.4	4.1	+1.3	+1.0
11. Appropriate procedures to follow in making referrals to different manpower agencies.	2.4	3.9	3.3	+1.5	+0.9
12. Requirements for entry level job skills in the various vocational technical areas.	2.1	4.0	3.5	+1.9	+1.4
13. Basic principles utilized in the teaching of job skills.	2.3	4.3	3.9	+2.0	+1.6
14. The levels of learning within a specific job cluster.	2.3	3.8	3.7	+1.5	+1.4
15. Values to be gained from student work programs such as:					
a) NYC	3.5	4.0	4.3	+0.5	+0.8
b) Cooperative programs with business and industry	2.9	3.8	3.7	+0.9	+0.8
c) DE	2.4	4.2	3.3	+1.8	+0.9
d) MDTA	2.1	3.6	3.1	+1.5	+1.0
e) OJT	2.7	3.7	3.3	+1.0	+0.6
16. Employment opportunities in various occupational areas at the:					
a) Local Level	2.5	3.8	3.7	+1.3	+1.2
b) State Level	2.4	3.4	3.4	+1.0	+1.0
c) National Level	2.3	3.2	3.1	+0.9	+0.8
17. Post-secondary and adult programs available to students in Kanawha County.	3.1	4.6	4.5	+1.5	+1.4
18. Procedures to follow in obtaining work permits.	4.0	4.6	4.6	+0.6	+0.6

TABLE VI (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
19. Minimum wage/hour law requirements.	2.7	3.8	4.1	+1.1	+1.4
20. Wage scales for different jobs.	2.3	3.6	3.3	+1.3	+1.0
21. Community resource persons available to participate in the occupational guidance program at my school.	3.3	4.5	4.3	+1.2	+1.0
22. Understanding of the personality traits that will enable students to work harmonously with others in different vocational areas.	3.4	4.3	4.1	+0.9	+0.7

Legend

IA - Initial Assessment
PA - Post Assessment
LA - Longitudinal Assessment

TABLE VII

ANALYSIS OF SECONDARY COUNSELORS' KNOWLEDGE AND UNDERSTANDING OF VOCATIONAL EDUCATION (PART II)

Item in Counselor Self-Rating Scale in Vocational Education, Part A	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
Knowledge and understanding of:					
1. The world of work as it relates to advising students in vocational and career decisions.	3.5	4.1	4.0	+0.6	+0.5
2. The overall occupational picture, i.e. the major groups of workers and employment trends within these groups.	2.8	3.8	3.9	+1.0	+1.1
3. Population shifts and job mobility.	2.6	3.4	3.6	+0.8	+1.0
4. Minority group job problems.	2.6	3.5	3.5	+0.9	+0.9
5. Work content (the duties performed and materials used) of various occupations.	2.8	4.2	3.9	+1.4	+1.1
6. Motivation of students toward the world of work.	3.1	4.0	3.8	+0.9	+0.7
7. Prerequisites (aptitudes, interests, personality traits, and training) required for success in different vocational areas.	2.9	4.1	4.1	+1.2	+1.2
8. Services provided by the following manpower agencies:					
a) Employment Security	3.1	4.3	4.1	+1.2	+1.0
b) Opportunities Industrialization Center (OIC)	2.0	3.9	3.6	+1.9	+1.6
c) Multi-CAP	1.8	3.7	3.2	+1.9	+1.4
d) Job Corps	3.0	4.1	3.9	+1.1	+0.9
e) CAMPS	2.2	3.1	3.1	+0.9	+0.9
9. AFL-CIO Union Requirements for certain trades and professions.	2.1	3.7	3.2	+1.6	+1.1

TABLE VII (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
10. Available resource materials for vocational technical education and vocational guidance.	3.0	4.3	4.2	+1.3	+1.2
11. Appropriate proceedures to follow in making referrals to different manpower agencies.	2.5	3.9	3.6	+1.4	+1.1
12. Requirements for entry level job skills in the various vocational technical areas.	2.7	4.1	3.6	+1.4	+0.9
13. Basic principles utilized in the teaching of job skills.	2.5	4.0	3.9	+1.5	+1.4
14. The levels of learning within a specific job cluster.	2.5	3.9	3.7	+1.4	+1.2
15. Values to be gained from student work programs such as:					
a) NYC	3.6	3.9	4.4	+0.3	+0.8
b) Cooperative programs with business and industry	3.2	3.9	4.1	+0.7	+0.9
c) DE	1.7	4.1	3.8	+2.4	+2.1
d) MDTA	2.2	3.6	3.3	+1.4	+1.1
e) OJT	2.7	3.6	3.4	+0.9	+0.7
16. Employment opportunities in various occupational areas at the:					
a) Local Level	2.2	3.7	3.8	+1.5	+1.6
b) State Level	2.5	3.5	3.4	+1.0	+0.9
c) National Level	2.4	3.3	3.2	+0.9	+0.8
17. Post-secondary and adult programs available to students in Kanawha County.	3.3	4.5	4.6	+1.2	+1.3
18. Procedures to follow in obtaining work permits.	4.1	4.6	4.7	+0.5	+0.6

TABLE VII (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
19. Minimum wage/hour law requirements.	2.9	3.8	4.1	+0.9	+1.2
20. Wage scales for different jobs.	3.0	3.6	3.4	+0.6	+0.4
21. Community resource persons available to participate in the occupational guidance program at my school.	3.0	4.3	4.2	+1.3	+1.2
22. Understanding of the personality traits that will enable students to work harmonously with others in different vocational areas.	3.2	4.2	4.1	+1.0	+0.9

Legend

IA - Initial Assessment
PA - Post Assessment
LA - Longitudinal Assessment

TABLE VIII

COMPARISON OF PARTICIPANTS' KNOWLEDGE AND UNDERSTANDING OF VOCATIONAL EDUCATION WITH THAT OF NON-PARTICIPANTS
(PART II)

Item in Counselor Self-Rating Scale in Vocational Education, Part A	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	NPA	IA	PA	PA over IA	PA over NPA
Knowledge and understanding of:					
1. The world of work as it relates to advising students in vocational and career decisions.	3.2	3.5	4.0	+0.5	+0.8
2. The overall occupational picture, i.e. the major groups of workers and employment trends within these groups.	2.9	2.8	3.9	+1.1	+1.0
3. Population shifts and job mobility.	3.1	2.6	3.6	+1.0	+0.5
4. Minority group job problems.	3.1	2.6	3.5	+0.9	+0.4
5. Work content (the duties performed and materials used) of various occupations.	2.9	2.8	3.9	+1.1	+1.0
6. Motivation of students toward the world of work.	3.3	3.1	3.8	+0.7	+0.5
7. Prerequisites (aptitudes, interests, personality traits, and training) required for success in different vocational areas.	3.2	2.9	4.1	+1.2	+0.9
8. Services provided by the following manpower agencies:					
a) Employment Security	2.9	3.1	4.1	+1.0	+1.2
b) Opportunties Industrialization Center (OIC)	2.2	2.0	3.6	+1.6	+1.4
c) Multi-CAP	1.8	1.8	3.2	+1.4	+1.4
d) Job Corps	2.8	3.0	3.9	+0.9	+1.1
e) CAMPS	2.5	2.2	3.1	+0.9	+0.6
9. AFL-CIO Union Requirements for certain trades and professions.	1.9	2.1	3.2	+1.1	+1.3

TABLE VIII (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	NPA	IA	PA	PA over IA	PA over NPA
10. Available resource materials for vocational technical education and vocational guidance.	3.0	3.0	4.2	+1.2	+1.2
11. Appropriate procedures to follow in making referrals to different manpower agencies.	2.3	2.5	3.6	+1.1	+1.3
12. Requirements for entry level job skills in the various vocational technical areas.	2.6	2.7	3.6	+0.9	+1.0
13. Basic principles utilized in the teaching of job skills.	3.0	2.5	3.9	+1.4	+0.9
14. The levels of learning within a specific job cluster.	2.7	2.5	3.7	+1.2	+1.0
15. Values to be gained from student work programs such as:					
a) NYC	3.1	3.6	4.4	+0.8	+1.3
b) Cooperative programs with business and industry	2.8	3.2	4.1	+0.9	+1.3
c) DE	2.3	1.7	3.8	+2.1	+1.5
d) MDTA	2.1	2.2	3.3	+1.1	+1.2
e) OJT	2.2	2.7	3.4	+0.7	+1.2
16. Employment opportunities in various occupational areas at the:					
a) Local Level	2.9	2.2	3.8	+1.6	+0.9
b) State Level	2.7	2.5	3.4	+0.9	+0.7
c) National Level	2.7	2.4	3.2	+0.8	+0.5
17. Post-secondary and adult programs available to students in Kanawha County.	3.2	3.3	4.6	+1.3	+1.4
18. Procedures to follow in obtaining work permits.	3.2	4.1	4.7	+0.6	+1.5

TABLE VIII (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part A	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	NPA	IA	PA	PA over IA	PA over NPA
19. Minimum wage/hour law requirements.	3.0	2.9	4.1	+1.2	+1.1
20. Wage scales for different jobs.	2.4	3.0	3.4	+0.4	+1.0
21. Community resource persons available to participate in the occupational guidance program at my school.	2.9	3.0	4.2	+1.2	+1.3
22. Understanding of the personality traits that will enable students to work harmonously with others in different vocational areas.	3.3	3.2	4.1	+0.9	+0.8

Legend

IA - Initial Assessment
PA - Post Assessment
NPA - Non-Participant Assessment

TABLE IX

ANALYSIS OF SENIOR HIGH COUNSELORS' ABILITY TO HELP STUDENTS MAKE WISE CAREER DECISIONS
(PART I)

Item in Counselor Self-Rating Scale in Vocational Education, Part B (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their ability above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
Ability to:					
1. Counsel students wisely on career decisions.	29	90	95	61	66
2. Help students understand the meaning of vocational training programs.	38	91	100	53	62
3. Correlate vocational training with academic school subjects.	38	95	90	57	52
4. Help students see that there is dignity and worth in all occupations whether they be professional or non-professional.	58	100	100	42	42
5. Help students identify their stongest needs and to select occupations that can help satisfy some of these needs.	15	91	90	76	75
6. Help students develop an awareness of the psychological and social satisfactions that can be found in various occupations.	29	72	71	43	42
7. Communicate to students that career selection is a developmental process requiring long-range thinking and planning.	39	100	90	61	51
8. Help students identify and assess their aptitudes, interests, personality traits, and values so that they can make better career decisions.	34	100	95	66	61

TABLE IX (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part B (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their ability above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
9. Motivate classroom teachers to explore with their students those occupations related to their subjects.	15	62	48	47	33
10. Spearhead the planning and executing of a vocational guidance program in my school.	29	76	76	47	47

Legend

IA - Initial Assessment
PA - Post Assessment
LA - Longitudinal Assessment

TABLE X

ANALYSIS OF JUNIOR HIGH COUNSELORS' ABILITY TO HELP STUDENTS MAKE WISE CAREER DECISIONS
(PART I)

Item in Counselor Self-Rating Scale in Vocational Education, Part B (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their ability above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
Ability to:					
1. Counsel students wisely on career decisions.	26	88	88	62	62
2. Help students understand the meaning of vocational training programs.	32	100	94	68	62
3. Correlate vocational training with academic school subjects.	19	94	94	75	75
4. Help students see that there is dignity and worth in all occupations whether they be professional or non-professional.	69	100	100	31	31
5. Help students identify their strongest needs and to select occupations that can help satisfy some of these needs.	37	81	88	44	51
6. Help students develop an awareness of the psychological and social satisfactions that can be found in various occupations.	37	94	94	57	57
7. Communicate to students that career selection is a developmental process requiring long-range thinking and planning.	50	100	88	50	38
8. Help students identify and assess their aptitudes, interests, personality traits, and values so that they can make better career decisions.	31	88	88	57	57

TABLE X (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part B (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their ability above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
9. Motivate classroom teachers to explore with their students those occupations related to their subjects.	6	63	75	57	69
10. Spearhead the planning and executing of a vocational guidance program in my school.	25	82	94	57	69

Legend

IA - Initial Assessment
PA - Post Assessment
LA - Longitudinal Assessment

TABLE XI

ANALYSIS OF SECONDARY COUNSELORS' ABILITY TO HELP STUDENTS MAKE WISE CAREER DECISIONS
(PART I)

Item in Counselor Self-Rating Scale in Vocational Education, Part B (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their ability above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
Ability to:					
1. Counsel students wisely on career decisions.	27	89	92	62	65
2. Help students understand the meaning of vocational training programs.	35	95	97	60	62
3. Correlate vocational training with academic school subjects.	29	95	92	66	63
4. Help students see that there is dignity and worth in all occupations whether they be professional or non-professional.	63	100	100	37	37
5. Help students identify their strongest needs and to select occupations that can help satisfy some of these needs.	24	87	89	63	65
6. Help students develop an awareness of the psychological and social satisfactions that can be found in various occupations.	33	81	81	48	48
7. Communicate to students that career selection is a developmental process requiring long-range thinking and planning.	43	100	89	57	46
8. Help students identify and assess their aptitudes, interests, personality traits, and values so that they can make better career decisions.	32	95	92	63	60

TABLE XI (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part B (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their ability above average to excellent			Per cent of gain	
	IA	PA	LA	PA over IA	LA over IA
9. Motivate classroom teachers to explore with their students those occupations related to their subjects.	11	62	59	51	48
10. Spearhead the planning and executing of a vocational guidance program in my school.	27	78	85	51	58

Legend

IA - Initial Assessment
PA - Post Assessment
LA - Longitudinal Assessment

TABLE XII

COMPARISON OF PARTICIPANTS' ABILITY TO HELP STUDENTS MAKE WISE CAREER DECISIONS WITH THAT OF NON-PARTICIPANTS
(PART I)

Item in Counselor Self-Rating Scale in Vocational Education, Part B (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	Per cent who rated their ability above average to excellent			Per cent of gain	
	NPA	IA	LA	LA over IA	LA over NPA
Ability to:					
1. Counsel students wisely on career decisions.	22	27	92	65	70
2. Help students understand the meaning of vocational training programs.	44	35	97	62	53
3. Correlate vocational training with academic school subjects.	28	29	92	63	64
4. Help students see that there is dignity and worth in all occupations whether they be professional or non-professional.	78	63	100	37	22
5. Help students identify their strongest needs and to select occupations that can help satisfy some of these needs.	39	24	89	65	50
6. Help students develop an awareness of the psychological and social satisfactions that can be found in various occupations.	44	33	81	48	37
7. Communicate to students that career selection is a developmental process requiring long-range thinking and planning.	56	43	89	46	33
8. Help students identify and assess their aptitudes, interests, personality traits, and values so that they can make better career decisions.	50	32	92	60	42

TABLE XII (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part B (Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1- Low)	Per cent who rated their ability above average to excellent			Per cent of gain	
	NPA	IA	LA	LA over IA	LA over NPA
9. Motivate classroom teachers to explore with their students those occupations related to their subjects.	33	11	59	48	26
10. Spearhead the planning and executing of a vocational guidance program in my school.	28	27	85	58	57

Legend

NPA - Non-Participant Assessment
IA - Initial Assessment
LA - Longitudinal Assessment

TABLE XIII

ANALYSIS OF SENIOR HIGH COUNSELORS' ABILITY TO HELP STUDENTS MAKE WISE CAREER DECISIONS
(PART II)

Item in Counselor Self-Rating Scale in Vocational Education, Part B	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
Ability to:					
1. Counsel students wisely on career decisions.	3.2	4.1	4.1	+0.9	+0.9
2. Help students understand the meaning of vocational training programs.	3.4	4.4	4.3	+1.0	+0.9
3. Correlate vocational training with academic school subjects.	3.3	4.3	4.2	+1.0	+0.9
4. Help students see that there is dignity and worth in all occupations whether they be professional or non-professional.	3.7	4.4	4.5	+0.7	+0.8
5. Help students identify their strongest needs and to select occupations that can help satisfy some of these needs.	3.1	4.1	4.1	+1.0	+1.0
6. Help students develop an awareness of the psychological and social satisfactions that can be found in various occupations.	3.2	4.0	3.9	+0.8	+0.7
7. Communicate to students that career selection is a developmental process requiring long-range thinking and planning.	3.5	4.4	4.0	+0.9	+0.5
8. Help students identify and assess their aptitudes, interests, personality traits, and values so that they can make better career decisions.	3.2	4.2	4.2	+1.0	+1.0

TABLE XIII (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part B	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
9. Motivate classroom teachers to explore with their students those occupations related to their subjects.	2.7	3.8	3.5	+1.1	+0.8
10. Spearhead the planning and executing of a vocational guidance program in my school.	3.0	4.1	3.9	+1.1	+0.9

Legend

IA - Initial Assessment
PA - Post Assessment
LA - Longitudinal Assessment

TABLE XIV

ANALYSIS OF JUNIOR HIGH COUNSELORS' ABILITY TO HELP STUDENTS MAKE WISE CAREER DECISIONS
(PART II)

Item in Counselor Self-Rating Scale in Vocational Education, Part B	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
Ability to:					
1. Counsel students wisely on career decisions.	3.1	4.1	4.1	+1.0	+1.0
2. Help students understand the meaning of vocational training programs.	3.3	4.3	4.3	+1.0	+1.0
3. Correlate vocational training with academic school subjects.	3.1	4.1	4.3	+1.0	+1.2
4. Help students see that there is dignity and worth in all occupations whether they be professional or non-professional.	3.9	4.8	4.6	+0.9	+0.7
5. Help students identify their strongest needs and to select occupations that can help satisfy some of these needs.	3.3	4.1	4.1	+0.8	+0.8
6. Help students develop an awareness of the psychological and social satisfactions that can be found in various occupations.	3.2	4.2	4.3	+1.0	+1.1
7. Communicate to students that career selection is a developmental process requiring long-range thinking and planning.	3.6	4.2	4.3	+0.6	+0.7
8. Help students identify and assess their aptitudes, interests, personality traits, and values so that they can make better career decisions.	3.3	4.0	4.3	+0.7	+1.0

TABLE XIV (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part B	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
9. Motivate classroom teachers to explore with their students those occupations related to their subjects.	2.7	3.6	3.8	+0.9	+1.1
10. Spearhead the planning and executing of a vocational guidance program in my school.	2.9	3.8	4.3	+0.9	+1.4

Legend

IA - Initial Assessment
PA - Post Assessment
LA - Longitudinal Assessment

TABLE XV

ANALYSIS OF SECONDARY COUNSELORS' ABILITY TO HELP STUDENTS MAKE WISE CAREER DECISIONS (PART II)

Item in Counselor Self-Rating Scale in Vocational Education, Part B	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
Ability to:					
1. Counsel students wisely on career decisions.	3.2	4.1	4.1	+0.9	+0.9
2. Help students understand the meaning of vocational training programs.	3.4	4.4	4.3	+1.0	+0.9
3. Correlate vocational training with academic school subjects.	3.2	4.2	4.2	+1.0	+1.0
4. Help students see that there is dignity and worth in all occupations whether they be professional or non-professional.	3.6	4.6	4.5	+1.0	+0.9
5. Help students identify their strongest needs and to select occupations that can help satisfy some of these needs.	3.2	4.1	4.1	+0.9	+0.9
6. Help students develop an awareness of the psychological and social satisfactions that can be found in various occupations.	3.2	4.1	4.0	+0.9	+0.8
7. Communicate to students that career selection is a developmental process requiring long-range thinking and planning.	3.5	4.3	4.1	+0.8	+0.6
8. Help students identify and assess their aptitudes, interests, personality traits, and values so that they can make better career decisions.	3.2	4.1	4.2	+0.9	+1.0

TABLE XV (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part B	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	IA	PA	LA	PA over IA	LA over IA
9. Motivate classroom teachers to explore with their students those occupations related to their subjects.	2.7	3.7	3.6	+1.0	+0.9
10. Spearhead the planning and executing of a vocational guidance program in my school.	3.0	4.0	4.0	+1.0	+1.0

Legend

IA - Initial Assessment
PA - Post Assessment
LA - Longitudinal Assessment

TABLE XVI

COMPARISON OF PARTICIPANTS' ABILITY TO HELP STUDENTS MAKE WISE CAREER DECISIONS WITH THAT OF NON-PARTICIPANTS (PART II)

Item in Counselor Self-Rating Scale in Vocational Education, Part B	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	NPA	IA	PA	PA over IA	PA over NPA
Ability to:					
1. Counsel students wisely on career decisions.	3.3	3.2	4.1	+0.9	+0.8
2. Help students understand the meaning of vocational training programs.	3.4	3.4	4.3	+0.9	+0.9
3. Correlate vocational training with academic school subjects.	3.1	3.2	4.2	+1.0	+1.1
4. Help students see that there is dignity and worth in all occupations whether they be professional or non-professional.	4.2	3.6	4.5	+0.9	+0.3
5. Help students identify their strongest needs and to select occupations that can help satisfy some of these needs.	3.4	3.2	4.1	+0.9	+0.7
6. Help students develop an awareness of the psychological and social satisfactions that can be found in various occupations.	3.4	3.2	4.0	+0.8	+0.6
7. Communicate to students that career selection is a developmental process requiring long-range thinking and planning.	3.6	3.5	4.1	+0.6	+0.5
8. Help students identify and assess their aptitudes, interests, personality traits, and values so that they can make better career decisions.	3.6	3.2	4.2	+1.0	+0.6

TABLE XVI (continued)

Item in Counselor Self-Rating Scale in Vocational Education, Part B	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low			Difference	
	NPA	IA	PA	PA over IA	PA over NPA
9. Motivate classroom teachers to explore with their students those occupations related to their subjects.	3.3	2.7	3.6	+0.9	+0.3
10. Spearhead the planning and executing of a vocational guidance program in my school.	3.1	3.0	4.0	+1.0	+0.9

Legend

NPA - Non-Participant Assessment
IA - Initial Assessment
PA - Post Assessment

TABLE XVII

ANALYSIS OF STUDENTS' KNOWLEDGE AND UNDERSTANDING
IN VOCATIONAL EDUCATION
(PART I)

Item in Student Self-Rating Scale in Vocational Education	Per cent who rated their knowledge and understanding average to excellent.		Per cent of gain
	IA	LA	
I would rate my knowledge and understanding of:			
1. The world of work as it relates to my major career interests.	89	96	7
2. The overall occupational picture, i.e. the major groups of workers and employment trends within my chosen career.	83	82	-1
3. The population shifts and job mobility.	77	84	7
4. Work content (the duties performed and materials used) of various occupations.	85	93	8
5. Prerequisites required for success in different vocational areas (aptitudes, interests, personality traits, and training).	82	87	5
6. Services provided by manpower agencies:			
a) Employment Security	48	58	10
b) Opportunities Industrialization Center (OIC)	40	52	12
c) Multi-CAP	24	28	4
d) Job Corps	48	52	4
7. Union requirements for certain trades and crafts.	60	61	1
8. Post-secondary and adult program available to students in Kanawha County.	64	74	10

TABLE XVII (continued)

Item in Student Self-Rating Scale in Vocational Education	Per cent who rated their knowledge and understanding average to excellent.		Per cent of gain
	IA	LA	
9. Procedure in obtaining a work permit.	70	75	5
10. Wage scales for different jobs.	70	79	9
11. Employment opportunities in various occupational areas at the:			
a) Local Level	67	68	1
b) State Level	53	66	13
c) National Level	46	56	10
12. Programs and training offered at the Career Technical Education Centers.			
a) Benjamin Franklin	29	55	26
b) Carver	71	94	23

Legend

IA - Initial Assessment
LA - Longitudinal Assessment

TABLE XVIII

ANALYSIS OF STUDENTS' KNOWLEDGE AND UNDERSTANDING
IN VOCATIONAL EDUCATION
(PART II)

Item in Student Self-Rating Scale in Vocational Education	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low		Difference
	IA	LA	
I would rate my knowledge and understanding of:			
1. The world of work as it relates to my major career interests.	3.4	3.5	±0.1
2. The overall occupational picture, i.e. the major groups of workers and employment trends within my chosen career.	3.2	3.3	+0.1
3. The population shifts and job mobility.	3.1	3.3	+0.2
4. Work content (the duties performed and materials used) of various occupations.	3.5	3.6	+0.1
5. Prerequisites required for success in different vocational areas (aptitudes, interests, personality traits, and training).	3.4	3.5	+0.1
6. Services provided by manpower agencies:			
a) Employment Security	2.4	2.8	+0.4
b) Opportunities Industrialization Center (OIC)	2.2	2.6	+0.4
c) Multi-CAP	1.7	2.0	+0.3
d) Job Corps	2.5	2.6	+0.1
7. Union requirements for certain trades and crafts.	2.6	2.8	+0.2
8. Post-secondary and adult program available to students in Kanawha County.	2.9	3.0	+0.1

TABLE XVIII (continued)

Item in Student Self-Rating Scale in Vocational Education	Mean Score Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low		Difference
	IA	LA	
9. Procedure in obtaining a work permit.	3.1	3.3	+0.2
10. Wage scales for different jobs.	3.0	3.2	+0.2
11. Employment opportunities in various occupational areas at the:			
a) Local Level	2.9	3.0	+0.1
b) State Level	2.6	2.9	+0.3
c) National Level	2.4	2.7	+0.3
12. Programs and training offered at the Career Technical Education Centers.			
a) Benjamin Franklin	2.0	2.7	+0.7
b) Carver	3.3	4.0	+0.7

Legend

IA - Initial Assessment
LA - Longitudinal Assessment

TABLE XIX

ANALYSIS OF COUNSELORS' EVALUATION OF PROGRAM CONTENT AND EFFECTIVENESS

Item of Content or Effectiveness	Mean Score		Difference	Per cent of Effectiveness		Difference
(Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	IA	LA	LA over IA	IA	LA	LA over IA
1. Consultants from Universities	3.61	3.93	+0.32	72	79	+7
2. "Quickie Tour of Carver"	3.97	4.07	+0.10	79	81	+2
3. Work Sample Exposures	4.97	4.72	-0.25	99	94	-5
4. Individual Plan of Occupational Guidance	4.06	4.03	-0.03	81	81	0
5. Representatives from Business	4.28	4.21	-0.07	86	84	-2
6. Representatives from Apprenticeships, Labor and Unions	3.92	4.03	+0.11	78	81	+3
7. Representatives from Manpower Agencies	4.11	3.76	-0.35	82	75	-7
8. Field Trip to Union Carbide	4.69	4.52	-0.17	94	90	-4
9. Group Guidance Demonstation Utilizing Test Interpretation	3.53	3.45	-0.08	71	69	-2
10. World of Work Tapes	4.34	4.34	0	87	87	0
11. Listening Teams	3.42	3.44	+0.02	68	69	+1
12. Life Career Games	3.36	3.00	-0.36	67	60	-7
13. Guidance Materials Resource Center	4.14	4.03	-0.11	83	81	-2

TABLE XIX (continued)

Item of Content or Effectiveness	Mean Score		Difference	Per cent of Effectiveness		Difference
(Scale: 5-Excellent, 4-Above Average, 3-Average, 2-Below Average, 1-Low)	IA	LA	LA over IA	IA	LA	LA over IA
14. Films from WERC Series	4.50	4.55	+0.05	90	91	+1
15. Counseling with Students from Summer Schools	4.33	4.07	-0.26	87	81	-6
16. Small Group Sessions with Consultants	3.89	4.00	+0.11	78	80	+2
17. Organization of Workshop	4.97	4.90	-0.07	99	98	-1
18. Overall Effectiveness of Program in Meeting Proposal Objectives to Date.	4.83	4.62	-0.21	97	92	-5

Legend

IA - Initial Assessment
LA - Longitudinal Assessment